178

1948-49

File No. 6572/36(2) XIV

P. W.

DEPARTMENT

B CLASS

Control **BRANCH**

Subject:— Machinery Requirements of Ghatabrabha Left Bank Canal Dn.

File No. 6572/36 XIV Con.

td. Secty. Slip 2' A—

G. R., G. D., No. 2108, dated 22-6-22.]

Std. Sectt. 78 e.

DOCKET SHEET

Subject:— Machinery Requirements of Ghatprabha Left Bank Canal Dn.

File No. 657/36 (23)

Public Works **DEPT.**

Control **BRANCH.**

References:—

Date.	To whom sent.	Notes and instructions.
26/10	C.S. E.D.N.	
3/11/48	S.E. (N)	
6/11/48	[illegible]	[illegible]
11/11	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
11/11	[illegible]	[illegible]

Appendix No 2

Estimate Form.

INGERSOLL - RAND (INDIA) LIMITED.
Devkaran Nanjee Building.
17-B. Elphistone Circle,
Bombay.
P.O.Box 468.

Rao Bahadur N.S.Joshi,
Superintending Engineer,
Special Investigation Circle,
DHARWAR.

No. E/RSB.

Date 9th Septr.1948.

Subject :- Compressed Air Rock Drilling
Pilot Plant for Ghataprabha
Left Bank Canal.

Dear Mr.Joshi :-

Per our discussion with you of September 1st, 1948 we list below our quotation for a portable compressed air plant, to operate with one wagon-mounted Jackhamer unit complete with all accessories necessary to drill 20 ft. deep blast holes.

We are pleased to quote as follows :

ITEM-1. PORTABLE AIR COMPRESSOR :-

ONE - INGERSOLL-RAND Model HKA-105, portable two-stage air-cooled, radial "V" type air compressor, mounted on four steel wheels driven by Waukesha Type 130 HS oil engine complete with automatic multi-speed Drillmore capacity regulator, automotive steering, spring mounted, less electric starting (hand-cranked)

Price ... Rs 12,540/- net each ex Godown, Bombay boxed for Railway shipment, including charges for delivery to Railway.

Included in above price is Rs 2090/-, to cover cost of ocean freight, marine insurance, duty and clearing -- charges.

Extra one box Factory recommended Compressor Spares for one year service.

Price ... Rs 485/- net.

Extra one box Factory recommended Engine Spares for one year service.

Price ... Rs 405/- net ex.Godown Bombay.

Specification of above portable Air Compressor :-

No. of L.P. Cylinders	...	2
No. of H.P. Cylinders	...	1
Dia. of L.P. Cylinder	...	5½"
Dia. of H.P. Cylinder	...	4½"
Stroke of Compressor	...	4"
Actual delivery	...	105 CFM.
Discharge pressure	...	100 per sq. inch.
Weight	...	3315 lbs.
Speed at full load	...	1225 RPM.
Speed at Idling	...	600 RPM.
B.H.P. at Full Load	...	24.4

Contd. on p

ITEM-2. WAGON MOUNTED JACKHAMER :-

ONE - INGERSOLL-RAND, Type JHM Wagon jack mounting complete with J-50 blower type heavy duty Jackhamer and Type F Air Line Lubricator for drilling holes to 20 ft. depth. The drill guide is constructed of 3" Channels which mounts the Chain drive and the multivane air motor feed. The frame is of the welded tubular type, mounted on three pneumatic tires with the guide, drill and drill steel centraliser mounted so it is free to move across the width of the frame for exact spotting of holes.

Price ... Rs 4300/- net each, boxed, ex.Godown, Bombay.

Specifications on above wagonjack :-

Air consumption of J-50 (full throttle)		100/105 CFM.
Weight with J-50	...	670 lbs.
Length	...	7'-6"
Width of tread	...	4'-3"
Height	...	9'-10"
Feed (Nominal Drill Steel change)		6 ft.
Size of Pneumatic tires (Rear)	...	5.00" x 15"
Size of Pneumatic tires (Front)	...	4.00" x 8"

ITEM-3. DRILL RODS :-

For the drill rods we recommend two complete sets from 2 ft. drilling length to 18 ft. drill lengths for either hand drilling or wagonjack drilling with an extra 2 sets in 6 ft. steel changes for wagonjack drilling only. Also we have added an extra two length of 22 ft. rods for full 20/22 ft. depth of holes. This scheme would result in the following for which we quote :-

INGERSOLL-RAND High-Life special alloy drill steel stud Jackrods, TY-B13A, 1" hollow hex. in the following sizes.

Qty.	Description.	Price ea. Rs	Total Rs
2	2 ft. Drilling length	18/-	36/-
2	4 ft. ,, ,,	25/-	50/-
4	6 ft. ,, ,,	32/-	128/-
2	8 ft. ,, ,,	39/-	78/-
2	10 ft. ,, ,,	46/-	92/-
4	12 ft. ,, ,,	53/-	212/-
2	14 ft. ,, ,,	60/-	120/-
2	16 ft. ,, ,,	67/-	134/-
4	18 ft. ,, ,,	74/-	296/-
2	22 ft. ,, ,,	81/-	162/-
			1308/-

Price Total Rs 1308/- net total, boxed ex.Godown, Bombay.

ITEM-4. CARSET BITS :-

In order to have a complete set of rods and bits that will drill to 10 ft. with a hand held jackhamer (i.e. 1-2 ft., 1-4 ft., 1-6 ft., 1-8 ft. and 1-10 ft. length), 5 Carset bits will be required. On the Wagonjack, we recommend 2 sets of 18 ft. rods in 6 ft. steel changes to be equipped with Carsets bits (i.e. 2-6 ft., 2-12 ft. and 2-18 ft. lengths). This would require 6 Carsets bits. Thus we have added an extra bit for the deep hole 22 ft. making a total of one dozen bits required which should give you approximately 3600 ft. of drilling. We quote :-

Contd. on page 3.

12 - INGERSOLL-RAND Tungsten carbide tipped four point center hole stud "Carset" Jackbits, Type 1-1/2 - 13XC4, 1½" dia. gauge.

Price each ... Rs 54/- Total for 12 ... Rs 648/-

net total, boxed, ex. Godown, Bombay.

For regrinding above bits to get the most footage drilled per bit we recommend a hand held high speed grinder with special grinding wheel, that can easily be gripped in a vice and the bit reground by hand methods in a few minutes.

ONE - INGERSOLL-RAND Size 4GV8 Multi-vane Grinder, 3000 RPM, complete with wheel guard spanner wrench and two special silicon carbide grinding wheels (Type C60J3VOS) 7" x 3/4" x 1-1/4".

Price ... Rs 740 net, boxed, ex.Godown, Bombay.

ITEM-5. HOSE AND ACCESSORIES ;-

2 - Lengths, 3/4" x 50 ft. long rock drill air hose complete with Couplings both ends and including. male spuds for connection.

Price each ... Rs 115/- Total for 2 ... Rs 230/-

net total, boxed, ex. Godown, Bombay.

Extra 3/4" Female Spuds	Price each	...	Rs 2/12/-
Extra 3/4" Male Spuds	" "	...	Rs 2/12/-
Extra 3/4" Hose Gaskets	" "	...	Rs -/4/-
Extra 3/4" Hose Clamp Complete	" "	...	Rs 3/-

PRICES :- All prices are based on the current prices of our Suppliers and subject to prior sale and -- availability of suitable Import licences. All prices are net, ex.Godown, Bombay, suitably boxed for Railway shipments and includes all charges from our Godown to Railway. Prices are based on exchange Rs 333/- per 100 U.S.Dollars per blue sheet of quotation and 15 to 20% (depending on the item) has been added. for ocean freight, insurance duty and clearing charges and are subject to variation depending on the current rates existing at date of delivery and any event will be billed to your account at actual charges incurred.

TERMS :- Regular Government of India or DGIS terms, viz., with Class 1A priority available to us, 90% after inspection and proof of despatch, balance of 10% after receipt of material by the consignee but in any event payments cannot be delayed for more than 30 days.

If Class 1A priority cannot be made available to us then our terms are :-

90% immediately we notify you material ~~will be~~ "will" ready for despatch and in case despatch cannot be made for reasons beyond our control (lack of Railway booking etc.), and balance 10% after receipt by the consignee in any event payment cannot be delayed more than 30 days.

DELIVERY :- Entire Pilot Plant to be ready for shipment ex.Godown, Bombay, 3/4 months after receipt of acceptable firm order by us.

Contd. on page 4.

If this does not satisfy your official opening date, we could demonstrate and drill 10 ft. blast holes with our Carset bits and hand held Jackhamers that will be available before 3 months time if you can supply the necessary -- compressed air, per you letter No.G-111 dated 28th Aug.1948.

We feel the plant as quoted is complete in all respects and know you shall be satisfied with the service it gives you.

Awaiting your earliest advice, we are

Yours faithfully,
For INGERSOLL-RAND (INDIA) LTD.

R.S.Benton
JP.
Encl : Blue Sheet.

Sd/- R.S.Benton.

*****

'True Copy'.

GEK/-

P A.

Appendix No.3

Letter No.E/RSB dated the 25th September 1948, from Messrs.Ingersoll-Rand (India) Ltd., Devkaran Nanjee Building, 17-B, Elphinstone Circle, P.O.Box 468, Bombay, to the Superintending Engineer, Special Investigation Circle, Dharwar.

Subject:- Confirming quotations on Portable Compressors and Jack hammers.

"Per my recent conversation with you and your Personal Assistant in Belgaum,. I confirm my verbal quotations as follows :-

INGERSOLL-RAND Portable two stage air cooled radial "V" type air compressors mounted on four steel wheels with varied drive as shown below, automatic multi-speed Drillmore capacity regulator, air receiver,. Flex disc hydraulic clutch, automotive steering, spring mounted with "starting" facilities as shown below. The Specifications on the following are similar to those specifications already given you in previous quotations.

A. Size 210 cubic feet per minute portable Compressor :-

1- Model HKA-210, with Waukesha Hesselman Oil Engine Drive.

Price with electric starting	...	Rs.22,300/-
Price less electric starting	...	Rs.21,400/-

2- Model IKA-210 with International Harvester Diesel Engine Drive.

Price with electric starting	...	Rs.23,375/-
Price less electric starting	...	Rs.22,475/-

B. Size 315 cubic feet per minute portable Compressors :-

1- Model HKA-315 with Waukesha Hesselman Oil Engine Drive.

Price with electric starting	...	Rs.29,185/-

2- Model IKA-315 with International Harvester Diesel Engine Drive.

Price with electric starting	...	Rs.30,675/-

Out entire 315 line comes equipped with electric starting All above prices are net each, ex. godown, Bombay based for railway shipment with charges from godown ~~xxx~~ to railway included. The prices are based on the present day prices of our suppliers and are subject to prior sale.

DELIVERY:- We have two units of the HKA-210 and three units of the IKA-315 shipped from the U.S., and expect them cleared and ready for shipment in India during the first week of November.

TERMS:- DGIS terms as previously quoted.

I wish to point out that all our 210 Compressors incoming are HKA-210 (with Waukesha drive) and all the 315 units are IKA-315 (with International drive) and that all units of both sizes have been ordered by us with electric starting.

With the IKA-315 units but less than two months away from Bombay, we highly suggest you purchase a 315 with three extra J-50 Jack hammers for your pilot plant.

On the Jack hammers we quote:-

P.T.O.

(v

1- INGERSOLL-RAND Heavy duty size J-50 blower type Jack hammer with 1" hexagon front-head for drilling to depths of 20 ft.

Price. ..... Rs.1,180/- net each ex.godown, Bombay.

1- INGERSOLL-RAND Heavy duty size JB-4 standard dry type Jack hammer (45 lbs. class) fitted with 7/8" hexagon front-head, suitable for all types of drilling to 10 ft. depths.

Price. ..... Rs.1,095/- net each ex.godown, Bombay.

DELIVERY: 1. J-50:- Approximately 2/3 months.

2. JB-4:- We are expecting 15 machines next month that were shipped from New York in the last week of August.

We believe that the above confirms all the prices discussed at our last meeting."

"True copy".

Head Clerk
to the Superintending-Engineer,
Special Investigation Circle.

RGY/30.9
Compd.by:

Appendix No 4

Comparative quotations from various firms for diesel-driven portable air-compressors.

S.No.	Name of the firm.	Capacity - Cubic feet of free air delivered per minute					Remarks.
		105 to 110	160 to 167	210	250	315	
1	M/S Volkart Bros.	Rs. 12800	Rs. 16200	-	Rs. 29400	-	
2	M/S Consolidated Pneumatic Tool Company.	Rs. 13950	Rs. 18350	Rs. 23840	-	Rs. 31200	
3	M/S Ingersoll Rand.	Rs. 12540	-	Rs. 23375	-	Rs. 30675	Lowest quotations.

Superintending Engineer,
Special Investigation Circle.

KBB/-

Appendix No 5

Comparative quotations from various firms for sinker drills.

Name of Company	Weight in lbs.		
	36	45 to 47	55 to 57
Consolidated Pneumatic Tools Co.Ltd..	820	945	995
Ingersoll Rand (India) Co.		1,095	1,180

Superintending Engineer,
Special Investigation Circle.

RGY/27.9
Compd.by:

Appendix No.1

List of machinery to be purchased from Messrs.Ingersoll Rand (India) Ltd., quoted in the firm's letter No.E/RSB dated the 9th September 1948 - copy attached vide Appendix No.2

S.No.	No.required.	Description.	Cost.
			Rs.
1.	1	Portable air compressor Model HKA-105	12,540
1a.	1	Compressor spares box.	485
1b.	1	Engine spares box	405
2.	1	Wagon mounted Jack hammer	4,300
3.	26	Drill rods length varying from 2' to 22'	1,308
4.	12	Carset bits	648
4a.	1	Multivave grinder	740
5.	1	Hose pipe 3/4" dia. 100' long.	230
5a.	1 set	Accessories for hose pipe	8/12
6.	1	Jack hammer T.B.4 type, vide quotations - copy attached(appendix No.3)	1,095/-
			Rs. 21,759/12
		say	Rs. 21,760

Superintending Engineer,
Special Investigation Circle.

RGY/30.9
Compd.by:

17

Letter. No.G-111

Office of the Superintending Engineer,
Special Investigation Circle,
Dharwar, ~~September~~ 1st October 1948.

To

The Secretary to Government,
Public Works Department,
Bombay.

Subject:- Plant and Machinery:
Requirement of the ---

Reference : Government letter, P.W.D., No.9194/36-I.B.(II), dated the 16th August 1948.

2. Government have ordered preliminary arrangements for the construction of Ghataprabha Left Bank Canal miles 1 to 44 to be -- made and all necessary articles and material purchased.

3. It is essential to purchase rock-cutting pneumatic machinery, as the orthodox method of taking shallow bores by hands will not only be more costly but it will not be speedy enough.

4. I consulted various firms and saw their machinery and have come to the conclusion that the offer of Messrs.Ingersoll Rand for sale of a pilot set as detailed in the accompanying list (appendix No.1), vide their letter No.E/RSB dated the 9th September 1948 - copy attached (accompaniment No.2) - should be accepted forthwith. This includes one portable compressor, one jack hammer mounted on a wagon drill complete, a dozen special tungsten carbide tipped carset bits and other accessories such as hose pipe, couplings etc. to - make the whole a complete unit. In addition to the one jack hammer J-50 type which is included in the wagon drill, and which can also be worked by hand without the wagon, I propose to include in the - order one more jack hammer J.B.4 type suitable for hand drilling. Separate quotations for both types of jack hammers J-50 and J.B.4 have been obtained from the firm vide their letter No.E/RSB dated the 25th September 1948 - copy attached (appendix No.3).

5. In our visit to the Bhor Ghats we found that they were - using Jack hammers etc. of the Ingersoll Rand make and found them working to their complete satisfaction. Actually there is one - point in purchasing this pilot plant from Messrs.Ingersoll Rand. They have offered to give it in India against rupees. The said firm of Messrs.Ingersoll Rand have gone into details of our requirements and have put in a complete list of rock-cutting machinery - that we may need, to allow the Ghataprabha Left Bank Canal miles 1 to 44 to be completed in the specified time. Their representative recently visited Dhupdal and saw the actual site and nature of - rock. (I may record that other firms were also requested to do the same but have not done so). The said firm have impressed upon me the great advantage of using a wagon drill instead of hand-used Jack hammers. Such wagon drills are not being used anywhere in - India but that should not prevent us from purchasing one machine first in view of this work of unprecedented magnitude, of which the Ghataprabha Left Bank Canal miles 1 to 44 is only one small - part. Perhaps we may find that the use of the wagon drill will reduce costs of rock cutting considerably. But to allow us to verify that, it is essential to give it a trial.

6. A regular comparison of costs of articles like Jack -- hammers is difficult as specifications differ. But that can be judged by the comparison of one or two articles. I attach herewith comparative statements for compressors (appendix No.4) and rock drills (appendix No.5) and these go to show that Messrs.Ingersoll Rand are (if at all) the cheapest so far as compressors are --- concerned. Though the cost of jack hammers as quoted by them is slightly more than that quoted by Messrs.Consolidated Pneumatic Tool Co., this itself is a minor item considering the cost of the whole pilot plant. Besides the general workmanship is better.

P.T.O.

It is also desirable to have all the machinery in the pilot order to be of one company so that they take full interest and responsibility in case difficulty arises.

7. I now request approval of Government to place this order with Messrs. Ingersoll Rand so that we can start working with the machinery with the least possible delay. During his personal visit, the representative of the firm promised to supply the compressor and the jack hammers in advance within two months even if the supply of the wagon drill is delayed.

8. I am also going through cost and specifications of machinery like Bull dozers, Rooters and Tournapulls and will write in shortly recommending the purchase of a few to start with. Proposals for more pneumatic machinery is also under consideration.

9. I suggest that no time be lost in making these purchases as this machinery is standard and as the firm is of good standing. Trial alone will allow us to detect defects (if any), make choice and to give us an idea about difficulties to be faced in future. This pilot set will go a long way to make our staff and local labour machinery-minded and will be useful whether we give work by contract or work a few miles departmentally.

D.A. 5 appendices.

Superintending Engineer,
Special Investigation Circle.

RGY/30.9
Compd.by: GR

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9194/36
6572/36(2)
Serial 54568

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6572/36(2)/54568
P.W. Deptt.

The S.E., S.I.C. requires rock-cutting, pneumatic machinery for taking bores, He, therefore, invited quotations from various firms for Air Compressor and Jack Hammer, and after scrutinising them the two proposes to purchase one Air Compressor with Spares, 1 wagon mounted jack hammer and accy. equipment and 1 (pilot set) ordinary Jack hammer, as per list within, from M/s Ingersoll Rand (India) Ltd., Bombay.

2. If approved, the S.E.'s proposal may be agreed to and he may be asked to place orders for the set through the D.G.S.&D. Bombay. Accy. draft put up may issue after U.O. to the P.W. Deptt. and the F.D.

Thro' DB(II), AB.(III) and DE(I)

19-10-48

19-10-48

A.B.(III).

3. This machinery is spl. and its cost will be debited to the Project estimate. Pending administrative approval to the Project, the S.E. S.I.C., has been authorized to incur expenditure.

Secy(W) 20/10/48.

20-10-48.

FINANCE DEPARTMENT
Fi E
8/11/48.

P.W.R. I

20/10/48

D.E.(RHS)

D.S.

20/10

CENTRAL DEPARTMENT
F. No. P-6572/2/48

20/10/48 Secy (W)

S.E. 21/10/48

U.O.V. to the E.I. Deptt. / F.D. 23/10 accts Dept.

No. 6572/36(2)-Con. 10 Letter P.N. Deptt.

B.C. 16th Oct 1948 / 16 Decr

To

The S.E., S&C

Subject:- Machinery and Equipment -
Requirements of -
to the Ghatapraabha Left Bank Canal
Project.

Reference:- Your letter No. C-111, dt-the 1st & 17 October 1948.

2. Your proposal - to purchase from M/s Ingersoll Rand (India) Ltd, Bombay one pilot set as detailed in appendix No 1 of your letter under reference costing Rs. 21,760/- for the Ghata prabha Left Bank Canal project is approved. The firm orders for this set should be placed thro the D. of S. S&P.O., Bombay and not direct

B.A. nil

By Order, etc

Copy forwarded to -
- the F.D.,
- the Ex.D.1.
- the A.G., Bombay,
- the D. of S. S&P.O., Bombay, (with copy of Appendix No 1)
- the Sr. Engr., Gh. Left B. Cl. Dn,

for information.

19/10/48

21/10/48
Orders issued after consultation with Finance & Ex.D
Notes may be seen when required.

D.S.

Scy (J)

Edl. & Ind. Deptt

VI

Seen and passed as no. to the Finance Deptt.

A 3/11/48 Submitted to Fin. & 6/11/48

P.W.D.6567/36(2). Finance Deptt.
P.W.R.I.

On the P.W.D.file No.9194/36 dealing with the administrative approval and technical sanction to the construction work of Ghataprabha Left Bank Canal, the F.D. has suggested that the proposed amount of about Rs.5.5 crores may be put up as a new item for the budget of 1949-50 vide Secy.F.D.'s note dated 15/11/48. On these papers the P.W.D.proposes to authorise the S.E.S.I.C.to purchase one pilot set costing Rs.21,760/- through the D.of I.and S.P.O. In view of the position stated in the opening sentence of this para,it does not seem desirable to incur expdre.on the scheme before the new item is finally retained. The new item will be scrutinised by the E.P.C.also. The F.D. may therefore suggest that the orders on this file may be deferred till the new item referred to is finally retained.

16/11/48

16/11/48

6572/36(2) 18/11

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6572/36(2)/63716

Comptr. P.W.Deptt.

Submitted with ref. to the U.O.R. dt the 28-10-48.

2 The F.D suggests that the orders for the pilot set regd. by the S.E. for the Ghataprabha left Bank Ch. Dn. may be deferred till a decision is reached on the F.D's proposal to put up a new Item ~~for the S.S Scheme~~ for the Ghataprabha left Bank Ch Project. ~~is retained for 1949-50~~. The decision on the main project may be awaited. 9.10.36

Thro' DA(II), AB(III)., ~~DA(I)~~

19-11-48.

Dy.P. 19/11

26/11/48

30/11/48

This department has not accepted the F.D. view that the Ghataprabha L.B.C shd be treated as a new item as the canal D.S. was part of the Gokak Pujil which was in work in progress. As such the item was not come under the scrutiny of the E.P.C. as a new item though the perusal to give A.A. is under consideration of F.D. The F.D. may be requested to agree their Secy (P) purchase of the pilot set for earth cutting machinery

17/12

Secy (P) We should put up for scrutiny all our irrigation schemes, whether in progress or otherwise & for orders of the E.P.C panel so that steps could be taken for the prosecution of these works.

1/12/48

11/12/48

Below copy of the letter from Ingersoll-Rand (India) Ltd. Bombay of 6th October 1948 addressed to the Executive Engineer, Ghataprabha Left Bank Canal Dn. Dhupdal.

Dear Sirs "IN: Mr.B.Krishna Iyengar.

Sub: M/cy. required for the construction of the Ghataprabha Left Bank Canal.

With reference your call on us this day and in confirmation of our conversations with you, we are pleased to state that we can offer you the following compressors and jack hammers from stocks and early incoming stocks.

HK-105 Compressor form stocks.

"K-210 & 315 compressors from shipment en-route ... waters per s.s. "Exhibitor" and s.s. "Jalekants" expected into port by end of October.

2 Nos. JA-45 Dry type Jack Hammers from stocks.

You will appreciate that all the stock position is as per day's and this is subject to prior sale.

We have already forwarded quotations to Superintending Engineer for above compressors and in case you are interested in these we shall be pleased to do the needful on hearing from you.

Yours faithfully,

Sd/-
For Ingersoll Rand (India) Ltd.

No.G-111 Dhupdal 15th Oct.1948.

Copy with compliments submitted to the Superintending Engineer, Special Investigation Circle, Dharwar, for favour of perusal and information.

Sd/- B.Krishnaiengar,
Executive Engineer,
Ghataprabha L.B.C.Dn.,Dhupdal.

Letter No.E/PSR dated the 11th October 1948, from Messrs.Ingersoll Rand(India)Ltd., Bombay, to the Executive Engineer, Ghataprabha L.B.C.Dn., Dhupdal.

- - -

Subject:- M/cy. required for construction of Ghataprabha Left Bank Canal.

"Further to our letter of 6th Oct. we wish to state that since writing you our letter of above we have received advice from our suppliers that "B-4, 45-lbs. class and also 750 Jack hammers which have been offered you previously have been shipped per s.s. 'Alleghany Victory" in September and are expected into port say by end of October or early November. As these are being fast sold but against prior received orders may we request you to kindly confirm your requirements so that we can make a firm reservation and supply."

P.T.O.

No.C-111/2

Office of the Executive Engineer,
Ghataprabha L.B.C.Dn.,
Dhupdal, 16th Oct. 1948.

Copy forwarded with compliments to the Superintending Engineer, Special Investigation Circle, Dharwar, in continuation of this office No.C-111 of 15-10-1948 for information.

Sd/- B.Krishnaiengar,
Executive Engineer,
Ghataprabha L.B.C.Dn., Dhupdal.

'True copies'

Srafts
Head Draftsman
~~Head Clerk~~
to the Superintending Engineer,
Special Investigation Circle.

RGV/21.10
Compd.by: RRB 21-10.

25

Below endorsement No.G-111 dated the 15th October 1948 and G-111/2 dated the 16th October 1948 from the Executive Engineer, Ghataprabha Left Bank Canal Division, Dhupdal, re: the purchase of machinery required for the construction of the Ghataprabha Left Bank Canal.

No.G-111

Office of the Superintending Engineer,
Special Investigation Circle,
Dharwar, October 1948.

Copy forwarded with compliments to the Secretary to -- Government, P.W.D., Bombay, in continuation of this office No.G-111 dated the 1st October 1948.

2. Very early sanction for the purchase of the pilot plant proposed therein is requested.

3 Placing an order for the pilot plant need not be delayed on account of the detailed quote of machinery needed — which will be issued on 1st the 25th inst.

Superintending Engineer,
Special Investigation Circle.

RGY/21.10
Compd.by: 21-10

Ly 24

Conds. DWDept.

The main ffps. have been refrd. WO. to the E.E.D. and the F.O. on. 22-10-48. Their return may be awaited.

29/10/48

29/10/48

29/10/48

P. W. D.
File No. 6572/36(2)
Serial No. 58836

No.G/80 Office of the Superintending Engr.
Special Investigation Circle,
Via Dharwar, 29th Oct.1948.

Messrs. Ingersoll Rand & Co.,

Fort. BOMBAY.

Subject: Capacity of compressors required for excavation in hard rock in Ghataprabha Left Bank Canal near Hukeri Station.

Dear Sir,

We had a full discussion last month regarding compressors and drills for excavation in hard rock of the type your representative saw on the Ghataprabha Left Bank Canal near Hukeri Road Railway Station.

2. We had full discussion with your Mr.Benton regarding the capacity of compressors required for work with a wagon drill and a jackhammer working on the same. Your representative made it absolutely clear, on being questioned several times, that a wagon drill carries more or less the same type of jackhammer as is worked with the hand, except for the fact that it is somewhat heavier. In your letters you have recommended the use of 55 lbs. jackhammers against 45 lbs. for hand work. Please now confirm this and let me know whether you advise a heavier wagon drill and a heavier jackhammer on the wagon drill for the type of work in Ghataprabha Left Bank Canal, regarding which we gave you complete details, both as regards quantity, depth of cutting and width of cutting.

3. Your representative also told us after quite long discussions that a 105 Cft. per minute compressor is all that is was required for the Jackhammer (55 lbs.) with a Wagon Drill. Please confirm this. In a recent meeting we had with some Government officials who visited the U.S.A. last year, it was claimed that a 105 Cft.compressor would be insufficient and that 315 Cft. compressor was essential, the minimum needed being 210. Please state whether your specification of 105 Cft.compressor is correct and whether a heavier Jackhammer (heavier than 55 lbs.) a heavier Wagon Drill and a larger compressor are considered suitable by you.

An early reply is requested.

Yours faithfully,

Superintending Engineer,
Special Investigation Circle

Copy is with compliments to Mr.K.M.Kantawala, B.E., A.M.I.E. S.C.E.(I), Deputy Secretary to Government (Roads & Buildings), Public Works Department, Bombay.

BR/27.10.

28

Con Pos

Dy Dept'll.

Award.

9-11-48

9/11/48.

Award Ltr
9/11/48 (11-12/48)

Con Pos

The E.D. and F.D. have been expedited in the matter.

13-11-48

13/11/48.

Signed
15/11/48

Dept Expedited
9.11.48

9/11/48

Comptd
3/11.

65 72/36(2)

9/11/48

60548

Cont'd

Very urgent

25,000—1-47—RS

29

File No. P.W.D. 6572/36(2)Con

Date 4-11-48 Public works Department:

Serial No. 2827

Std. Sectt. 23 a.

Unofficial Reference

The attention of the E & D Deptt and Finance Department is requested to the unofficial reference from No. 6572/36(2)Con dated 22-10-1948. this Department noted in the margin, the early return of Subject— machinery required for Ghataprabha Left Bank Canal which with a reply will be convenient.

Yours

for Assistant Secretary to Government.

Unofficial reference to the E & D Deptt and Finance Department No. 6572/36(2)Con, dated 15th November 1948

Ed. & Pub Dept

The main P.W.D. papers were passed on to the F.A. on the 5th Nov/Cap.
There may also be passed on to.
the Mail Department on communication

X
19/11/48
Issue
19/11
2011

NSJ
26/11/48

Issue to F.A. & 24/11/48

Passed on to F.A.
D
24/11/48
-27

FINANCE
File No. X (F)
Date 26/11/48
Serial

Fin. Dept
PWRT

The main case has been returned to the P.W.D. on 18/11/44. This may be returned in confirmation

No 4
26/11/44

K.V.K.
27/11

Ag. Secy.

sent to the P.W.D. 9/12/11/44

Com
30/11

Tonk
Hinglaj

6572/36(2)
66016

Contd.

6572/86(2)/66016
Pl. Debtt.

Resubmitted, together with Sr Nos. 58886, 60548 and 66016, with ref. to the orders of the Secy (9) of the 1-12-48

9. The orders for these pilot set may for the time being, be deferred till the orders of the E.P.C are obtained.

Thro' JB(II)/AB(III) & DE(I)

1-12-48
I.B.(II)

3. With ref. to Secy. (Irrgn.)'s Note dated the 1-12-48, it may be stated that the Expenditure Priorities Committee scrutinises all new items of expenditure for 1949-50 costing Rs. 25,000 in all (Rs.

Rs. 20,000/- in the case of new major works) or Rs.5000/- per annum recurring. As regards expenditure already sanctioned ~~and scrutiny of the following type of~~ the Committee will scrutinise the schemes which satisfy the following conditions:- ~~Schemes already sanctioned.~~

(i) those which have been sanctioned as new items either in the current year's budget (1948-49) or in the supplementary grants already made in the current year and

(ii) those which, in each individual case, exceed a cost of Rs.1 lakh in all (viz. recurring + non-recurring) or Rs.20,000/- per annum recurring.

The necessary action has already been taken separately to place such irrgn. schemes which require to be placed before the E.P.C. for scrutiny according to the above criterion. Action reg: new items for next year, ~~necessary action~~ will be taken by the F.D.

As regards the Ghataprabha Left Bank Canal Scheme, it may be stated that the E.P.C. has since decided to allow expenditure to be incurred on this scheme during

during the current year. In views of this, the orders may now, if approved, be placed for pilot set.

4/12/48 4/12/48.

4/12

Sec. (T) Seg (I) I was given to understand by Secy F.D. that F.D. wants starting such items which were admitted even in 1947-48 & for which no expenditure was incurred in that year or even in the subsequent year. B

8/12/48.

to JB(2)

18/12/48.

The F.O. has sent up the case to Exp Pr. Unofficial staff + have agreed with the working hours + hence there appears no objection to orders being set.

18/12

Seg (I.)

15/12

15/12/48

Contr.

Resubmitted.

2. The draft at page 20 ante may now be issued.

16/12/48

16/12

15/12/48.

11

D.O.No. G-111. Office of the Superintending Engineer,
Special Investigation Circle,
Via Dharwar, 15th Dec. 1948.

Dear Mr. Gurjar

Subject: Pilot Plant for Ghataprabha Left Bank Canal.

It is now about two months since I sent in proposals for the immediate purchase of pilot plant as quoted by Messrs. Ingersoll Rand for Jack-drills, Jack-Hammers including compressor.

2. I am astonished to find that no orders have been issued by Government. Perhaps the difficulty was Government's indecision regarding starting the Ghataprabha Left Bank Canals. ~~I know as~~ now decided the work is to be taken up immediately. I, ~~therefore~~, request that the said order may please be sent without delay.

Yours

To

N.P.Gurjar, Esqr.,
I.S.E.,
Chief Engineer & Secretary
to Government,
Public Works Department,
B O M B A Y.

BR/15-12.

What is happening to this ?

17/12

Comptr. D.W.D.

The Orders sanctioning the proposal of the S.E. S.D.C to purchase one bitot set to the Ghatal Irrigation Project have been issued to-day. No action is therefore necy.

17/12/48

17/12/48.

17/12/48

Secy (9) 16/12

P. W. D.
File No. 6572/36(2)
Serial No. 70273

A B III pl to see the secy's notes at f. 22 & 35 and return the papers to Cn Br.

18/12/48.

T & A B III

6572/36(2)

P.W.D. 70273

A63 (III)

Resubmitted with ref. to the Secy. (P)'s note P.35 of the 8-12-48.

2. Informal enquiries were made in the F.D. (Budget Br). It is understood that no such instructions have been issued to the F.D. offices. This matter is of a general nature and concerns all Depts. of the Secretariat. In the circumstances, the F.D. may see this ref. for favour of advice whether the items as per the Secy's note P.35 may be sent to the F.D. for sanction of the E.P.C. and, if so, to state the monetary limit for sanction of such items.

Thro: A63 (II)

21/12/48

Thro' F.D. of 23/12/48.

(Jnl. ref. 1 awaiting 51.169)

Jnl 24/12

21/12/48

S.Secy

Con Br Pl take action

21/12/48

Chief Engr

P.W.D. R I

23/12/48

p.t.o.

40

Finance Department-(G).

At present the scrutiny of the E.P.C. is confined to new items which are included in the current year's budget or supplementary demands and are over the limits prescribed in para.2 I of G.C.No.5858/33-G dated 13-11-1948. New proposals of expenditure which are new items by the usual limits will also be scrutinised as and when the proposals are received. Thus the examination does not normally extend to new items of previous years but there have been instances of such items being scrutinised either because they are not yet started and it is convenient at this stage to scrutinise them before any expenditure is incurred or there is a large variation in the estimated cost which requires to be examined in the light of the anti-inflationary policy. No instructions have however been issued to departments and each proposal is being examined on its merits. The P.W.D. may be informed accordingly.

OKL
27/11/48

Scrutiny, as a matter of course, of new items admitted in 1947-48 & previous years has not so far been undertaken by the E.P.C., though papers in regard to a few individual items of this type have been called for and when [illegible] item happens to come to the notice of the E.P.C. in some other context. The same practice, viz. any additional examination of cases of this type, will continue. If however all such schemes are decided to be examined by the E.P.C., a general circular will be issued to Depts. As far as I can see at present, general examination of cases seems unlikely.

AB III 30/12

27/12

P. P. 6572/36(2)

S.No. 72716

AB

27.12

works P.W.D. dy 27.12.48

6572/36(2)
72716

A&B (III) P.W.D

Submitted.

2. P.C. on Secy (I)'s note p.35 of 8.12.48 re: scrutiny by the E.P.C. of new items admitted in 1947-48 and the F.D. notes at p.40. In view thereof no action is necessary.

This A&B (II)

30/12/48.

30/12/48

✓

D.S (RIB)

D.S

Secy (I) Secy I

BM 31/12/48

31/12

But what about the contents of RB Joshi's D/o letter of 5/1/48? Where is the order for the pilot plant?

To Com. Br. with ref. to Secy's note about.
STILES.

657/36(27)/72 416.

Cont'd.

PWD Delt.

Resubmitted with ref. to the query of the Secy (I) at the 5-1-49. ante

2. The draft sanctioning the proposal — ante 20 of the SE, KDC, to purchase one pilot set for the Ghataprabha Left Bank Canal Project has already been issued. ante 35

7-1-49

11/1

25

13/1/49 Secy (I)

Resubmitted 15-2-49

2.49

Letter.

No. G·111

Office of the Superintending Engineer,
Special Investigation Circle,
Dharwar, 19th November 1948.

To

The Secretary to Government,
Public Works Department, Bombay.

Subject:- Investigation into sites of dams in the Ghataprabha and other valleys for Major Irrigation Schemes in Karnatak -- boring machine ~~mechanic~~ for determining depth of foundations with speed.

Experience has shown that unnecessary delay is being caused in investigating sites for dams due to --

i) sufficient number of Calyx Core Drills not being available;

ii) the slow progress of these drills (about 2 to 5 ft. per day) in rock;

iii) the difficulty of transporting and assembling parts of the machine at the site of works.

2. I have been in correspondence with firms for the -- supply of drilling machines with a much larger footage per day. After enquiry I came to know that Messrs.Larsen & Toubro of Bombay are able to supply the following machines:

1) Failings "1500" Hole master Core Drill.

2) Failings "750" Sizmo Core Drill.

The figures 1500 and 750 respectively indicate the depth to which the drill can penetrate. Actually we are not in need of the former; the latter will suffice as the ever maximum depth to which we will have to probe for our projects will not approach 200 ft. Enquiries with Messrs.Larsen and Toubro go to indicate that the "1500" Core Drilling machine could be available by February if an order were placed immediately. - I was also told that the "750" Core Drill machine would be available by May if ordered immediately. I am, however, not sure of the delay in supply of the latter machine. I expect to do so very shortly when the Chief Manager of the firm is going to see me this month on his return journey from -- Bangalore.

3. The most attractive feature of both these machines is their speed in footage of rock drilling per day. Messrs.Larsen and Toubro are prepared to guarantee a rate of core at 4 ft. per hour so that normally we should be able to determine the suitability or otherwise of any given site in a matter of -- 3 to 4 days of actual working and one week only including transport. The second most attractive feature of the machine is its locomotion, having a diesel engine which works the drilling shaft and also the locomotion gear. The machine can, therefore, reach any spot without being required to be -- pulled.

4. The cost of the machine is, I understand, of the order of Rs.1.1/2 lakhs in the former ~~about~~ and about Rs.90,000 in the latter. The cost of an ordinary Calyx drill is about -

P.T.O.

10,000 to 15,000 rupees. Comparing the footage per day the machine now recommended would give a footage performance equivalent to 10 to 12 Calyx drills. As such the cost of the machine (750) is more than justified. ~~though probably~~ further negotiations in the matter ~~need~~ may be taken up. I very strongly recommend that Government should purchase one such machine. After the work of the survey of our dams in Karnatak, the machine would be useful for sites of other dams and also of bridges ~~also~~.

the figures of costs are rough + in round figures and as such

5. Such a machine alone will allow me to make a selection of the cheapest site in the Ghataprabha Valley within a reasonable period, i.e. say a few months. If on the other-hand I am to carry on work with the one Calyx core drill placed at my disposal, the time required for taking cores at the various alternative sites would be about 3 to 5 years. Even after taking into consideration the additional Calyx core drill loaned from Mr.Narendra Singh Singhani of Rakaskop (near Belgaum), the period for investigation of foundations will be ~~not less than~~ any where upto 3 years. Again, Mr.Singhani may request his machine to be returned any time.

To delay matters for such a long time in the case of investigation of an important scheme like Ghataprabha Valley Development would be detrimental and there is therefore no alternative but to purchase the said machine. Any delay in ordering out that will result either in --

1) indecision about the site of dam and hence delay of several years in starting the food supply scheme so badly needed by Bombay, or

2) the choice of an incorrect site of dam involving an extra cost of anything upto 1 crore, in our unpreparedness to invest one lakh on the cost of this machine.

I am certain Government would not like either of these.

6. Actually merely supplying a larger number of Calyx core drills to give the same core footage per day as Failings "750" will not do. For such 10 machines cannot all work on the same bore. Very often, in fact in almost ~~in~~ all cases, one drill hole on the banks or in the river bed decides the suitability of the sites or otherwise. A machine which gives the result of this one (or two) drills, within a week or 10 days is what is highly desirable, if not essential. A speedy - drilling machine is, therefore, not only indispensable but would also save money, labour and time being wasted on other bore holes if results of the "master" bore hole in river bed or on bank is ~~unsatisfactory~~ the each of the alternative sites can be known in a reasonably small period.

7. As stated above I am in correspondence about further details of the machine but request Government's ~~xxx~~ general approval to the proposal so that we can place an order within one month.

Superintending Engineer,
Special Investigation Circle.

RGY/17.11.
Compd.by:

Copy forwarded with compliments to the Director of Industries and Stores Purchasing Officer, Bombay, for information.

2. Kindly inform me whether you have any other speedy machine for taking cores in rock in view, and if so please inform me the names of the firms with their addresses.

Note explaining requirements of Core Drilling Machine required by the Superintending Engineer, Special Investigation Circle.

Area:- Karnatak and also part of Maharashtra in Bombay Province.

Type of rock:
(a) Deccan Trap - Basalt.
(b) Quartzite.
(c) Granite.
(d) Hornblende schist.
(e) Dharwar schist.

Overburden of soil over rock :-

(a) (i) Black cotton soil varying from 2' to 20' overlying
(ii) Soft or Hard trap murum overlying
(iii) Soft rock or boulders in Trap.

(b) (i) Silicious soil varying from 10' to 20' overlying
(ii) Quartzite murum 5' to 50'.

(c) (i) Gravelly and silicious soils 10' to 50' overlying
(ii) Granitic murum 5' to 10' overlying
(iii) Soft rock 5' to 50'.

(d) (i) Semi-silicious black soil 3' to 10' overlying
(ii) Soft rock 5' to 20'.

Black soil and even some murums may need casing pipe.

Speed expected: 3' per hour minimum.
5' or more per hour desirable.

Rainfall:
Min. Max.
20" to 120" per year.
8" to 80" in Kharif.
10" to 20" in Rabi.
2" to 5" in Hot weather.

Transport: Metalled roads within 10 miles.
Village approach roads of earth (but in rocky areas)
These latter can be repaired temporarily.
A clearance of chassis of 12" essential.
-do- upto 24" desirable.

Traction: Locomotion highly desirable.
Crawler tractor or bullock carts can be arranged if necessary for transport to site.

Standard of crew: As far as possible not more than 2 or 3 labourers should be required and not more than 2 mechanics.

General: The machine should be accompanied by 200 ft. of casing pipe.
Spare parts sufficient for 2 years should be supplied along with the machine.
Tools for working and repairs should also be available along with the machine.

7
Superintending Engineer,
Special Investigation Circle.

RGY/19.11
Compd.by:
17.11

You are also requested to write to the firms asking them to send me literature and quotations for the Core Drilling machines.

The accompanying note gives my requirements and may be sent to the firms concerned, so that they may understand our requirements.

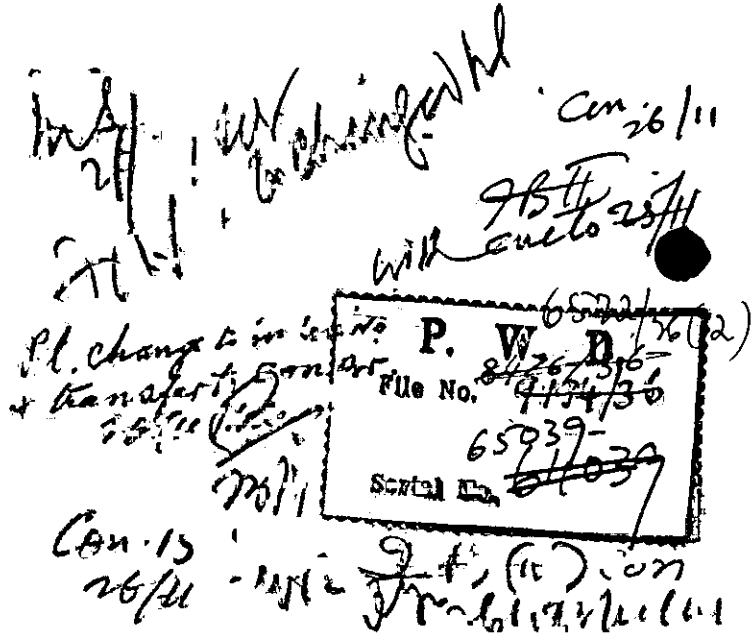
Accompts. 1 Note.

Copy to the Executive Engineer, Ghataprabha Left Bank Canal Dn., Dhupdal. Please report the full address of the Calcutta firm* who supply Diamond Core Drills, so that we could get into correspondence with them and ascertain the cost and performance (feet of core per day).

Copy to the Executive Engineer, Irrigation Projects Dn.(South), Belgaum.

RGY/19.11
Compd.by: 17.9

* As given by the Mechanical Executive Engineer, Tungabhadra Dam Hospet.


P. W. D.
File No.
Serial No.

49

No.9-111.

Office of the Superintending Engr.,
Special Investigation Circle,
Dharwar, 11th December 1948.

To

Messrs.Larsen & Toubro Ltd.,
Lloyd Building, Dougall Road,
Ballard Estate, Bombay.

Subject:- Tender No.SP.1613/28 - Core Drilling Machine:
'George E.Failing' Model '1500' Drill complete with operating & coring equipments, bits & spares.

Reference : Your letter No.3/2972/0 dated the 7th December 1948 addressed to the Asstt. Stores Purchasing Officer, Bombay and copy to this office.

Gentlemen,

The machine is so costly that before selection - finally it is essential that --

(1) we know cost of Failings 750 Core machine. You are also requested to state why you consider that that will not serve, as the ~~max~~ maximum depth we want to reach will be not more than 250', in any case.
(2) You give us an actual demonstration for 2 or 3 bores at one of the Dam sites.

(i) In soft material 100' deep
(ii) In rock (Trap) 125' deep
(iii) In quartzite rock 125' deep or so.

It is impossible to depend upon pamphlets only for purchasing such costly machines. An actual demonstration alone will convince me about the performance in general and the footage per hour in particular, which is the particular feature for which the core machine (Failings) has been recommended, by me to Govt.

2. We will be prepared to pay you for transport to site if you so desire and also for actual work of these test cores, at a fair rate if you want. Please communicate with me on this immediately.

3. In this connection please note that your Mr.Larsen was expected ~~promised~~ to see me personally and explain details ~~personally~~ last month on his return journey from Bangalore. He neither saw me nor has anything been heard from you in the matter.

Yours faithfully,

Superintending Engineer,
Special Investigation Circle.
9-12

P.T.O.

50

Copy forwarded with compliments to --

1. The Stores Purchasing Officer, Bombay. ✓
2. The Secretary to Government, P.W.D., Bombay.

2. The quotation should ~~not~~ please be finally accepted only on the above conditions and on my getting a footage of 4' to 6' per hour as claimed in hard rock, by a demonstration

RGY/9.12
Compd. by: 9-12

12/11 Con. 14/12

6572/36(2)

69443

16/11 MW

51

No.G-111/2. Office of the Superintending Engineer,
Special Investigation Circle,
Dharwar: 11th December 1948.

To

The Director of Industries
and Stores Purchasing Officer,
Old Custom House Yard,
Fort, Bombay.

Subject: Machinery for Ghataprabha
Left Bank Canal Project-

Reference: Letter No.G/PSR, dated the 7th December 1948 from Messrs Ingersoll-Rand (India) & Ltd., Bombay, addressed to you and copy endorsed to this office.

2. The request of Messrs Ingersoll-Rand Ltd. for granting them a period of 10 to 15 days is only fair. In the case of machinery costing a lakh rupees or thereabout, a period of 15 days is a minimum.

3. I do not insist upon any particular type of Drilling Machine. I only want a core-Drilling Machine and not a percussion machine. The machine may be Calyx, Diamond, Fallings, or anything similar. The main requirement is speed ~~which~~ which should preferably be 3' to 6' per hour in Hard Rock and also in Soil (requiring ~~piping~~ lining pipe).

4. The size of core should preferably be 4" but no objection for 6" or even a larger core. The cost per foot of core length, however, increases with diameter and hence 4" preferred.

The firm should quote approximate comparative cost of Core per foot length for the different diameters ~~of Core~~, viz. 4", 6", 8", etc.

The firm wants to know the type of core. I cannot understand what they want. We want the usual round core.

5. There appears to be a definite mis-understanding about the type of Drive. I do not want Drive with normal labour. I insist on power drive both for the core machine and if possible, for propelling the whole machine to site of work. I do not, however, insist on the latter but do insist upon the former.

6. I wonder whether you sent a copy of the Tender form to this office. This is essential so as to leave no mis-understanding and to allow me to reply to querries recieved from the firms as in this case.

7. I also request your attention to this office endorsement No. G.111, dated the 15th November 1948 and to the condition laid down therein, viz.

1) I want the Company to guarantee footage per hour
and 2) I want them to give me an actual demonstration for one or two bores, 100' deep and for which we are willing to pay. This alone will allow the speed to be tested and verified.

Superintending Engineer,
Special Investigation Circle.

Copy.

Copy forwarded with compliments for information to :-

1) Messrs Ingersoll-Rand (India) Ltd., Bombay, with reference to their No.G/PSR, dated the 7th December 1948.

2) The Secretary to Government, Public Works Department, Bombay.

G.10.12.
compd. by

Cash

PWDeptt.

Submitted together with S-No. 65039.

2-Returns of main purposes which have been retd. to-day to the PD on 21-12-48 may be awaited.

Await Bill (17-1-49)

20/1/1949

Con. 19/12

6572/36(2)

6995

21/12/48

No. G.111 Office of the Superintending Engineer,
Special Investigation Circle,
Dharwar, 12/12 Dec.1948.

To

The Secretary to Government,
Public Works Department,
BOMBAY.

Subject: "Failings" New Modern Drill.

I was in correspondence with Messrs. Larsen & Toubro Ltd., about a rock core machine. They offered two -

1) 1500 "Failing" Core Drill

2) 750 "Failing" Core Drill

They have now sent me details about the latter which costs Rs.83,000/-.

2. In this connection, I invite attention to the tenders called for by the Assistant Stores Purchasing Officer, Bombay and to point out that in replying the same Company, Messrs. Larsen and Toubro have stated that "Failings 1500" is what they recommend and have quoted Rs.1,87,000/-for that.

3. I am asking Messrs. Larsen & Toubro to send to you copies of their letters under which they quoted for both these.

4. I wanted to discuss this with their Mr.Larsen and cannot speak definitely till then but I take the opportunity of insisting on an actual demonstration before making a choice.

5. The question is what is to be done in case a machine is not available in India, for demonstration purposes. Will Government be pleased to permit me to visit a spot in India if it is available for demonstration somewhere?

6. I consider it dangerous to spend large sums in purchasing useful but costly machines, without actually seeing them in working conditions and satisfy oneself about its performance and speed etc. The shovel seen by me at Tungabhadra is an example.

7. In this connection, I would like to be informed of the responsibilities of the Stores Purchasing Organization i.e., the Director of Industries, in making the selection and in ensuring that the machine ordered will give the performance expected of the same. Unless there was a clear understanding on this point, confusion resulting in waste of Government money is likely to result. The matter should therefore, it is suggested, be brought to the special notice of Government and their orders obtained.

Superintending Engineer,
Special Investigation Circle.

Copy of paras 1 to 6 only to Messrs.Larsen & Toubro Ltd., Lloyd Buildings, Dougall Road, Ballard Estate, Bombay, with reference to their No.3/3103/0 dated the 9th Dec.1948.

2. Kindly send to the Secretary to Government a copy of the letter of yours with all accompaniments and also a copy

P.T.O.

of your No.3/2972/0, dated 7th Dec.1948 (with accompaniments) under which you gave details for "1500 Failings"

3. I await personal contact with Mr.Larsen of your firm.

BR/12-12.

6572/36(2)

69952

"CATERPILLAR" DIVISION
LARSEN & TOUBRO LIMITED.
P. O. BOX 278,
INDIAN MERCANTILE CHAMBERS,
NICOL ROAD,
BALLARD ESTATE,
BOMBAY.

December, 7, 1948

B/2972/O

Asstt. Stores Purchasing Officer,
Office of the Director of Industries
Old Custom House Yard, Fort,
Bombay.

Dear Sir:

Tender No.SP.1613/28 - Core Drilling Machine
'George F. Failing' Model '1500' Drill
complete with Operating & Coring
Equipments, Bits & Spares.

We thank you for your letter No.SP.1613/28/11729 dated 3rd. instant calling tender for one Core Drilling Machine required by the Superintending Engineer, Special Investigation Circle, Dharwar, and are very pleased to state that we are in a position to offer you our 'Failing' Holemaster Drills.

On studying the particulars furnished by you we recommend that our '1500' Standard Drilling Unit will suit your requirement and therefore our quotation for the same complete with Operating and Coring Equipments, Bits and Spares recommended for two years normal working of the Drilling Unit is enclosed herewith. We are also attaching herewith our illustrated catalogue for this drilling unit which we hope you will find very informative.

The '1500' Standard Drilling Unit that we are offering you is mounted on an International KBS-6 Truck with K67 BLD-269 Petrol engine, but however, if you require a Diesel driven drill we will be pleased to furnish you this drilling unit on an International KBS-7 with a Buda 6DT Diesel engine at an additional price of Rs.12,260/-.

Our enclosed quotation includes complete operating and coring equipments with necessary Bortz Set Diamond Bits to take 4" cores of the sizes mentioned in your above letter.

Regarding delivery, although our general delivery period to effect shipment in about 3 months time from the date of opening our Letter of Credit in New York, in this instance we and our Principals shall endeavour our best to ship this drill as early as possible.

Cont.. 2

December 7th 1948..

Further, we wish to invite your attention to the service clause of our enclosed quotation. As stated therein we will be pleased to assist you in putting the drill to satisfactory work and to train your field staff for a period of two to three weeks in proper operation and maintenance of the drill. In this connection it may not be out of place to mention that we may in our service a fully qualified Drilling Engineer who has specially undergone training with our Principals in America.

Trusting that you will find the above offer interesting and assuring you of our best services at all time, we are,

Yours faithfully,
for LARSEN & TOUBRO LIMITED

Encl: Quotation &
Catalogue

Sd....
(I.J. GHOULS)

EL:
pc:kr

cc. Rao Bahadur N.S. Joshi
B.E., M.I.E., M.R. San. I.
Superintending Engineer
Special Investigation Circle, Dharwar.
This has a reference to your letter No.G,111 dated 3rd. November, 1948.

LARSEN & TOUBRO LIMITED

ENGINEERS.

Branches at:
CALCUTTA: 8 ROYAL EXCHANGE PLACE P. Box 619
MADRAS: 120 ARMENIAN STREET P. Box 295
KARACHI: NARIMAN KOTHARI CHBRS: McLEOD ROAD,
NEW DELHI: 64 REGAL BLDG. CONNAUGHT PLACE
TELEGRAMS: "LARSENBRO"
Codes: ACME, BENTLEY & BENTLEY'S SECOND

"CATERPILLAR" DIVISION

Head Office:
J. K. BUILDING DOUGALL ROAD
BALLARD ESTATE
P. O. BOX No. 278
BOMBAY,

December 7, 1948.

Asstt. Stores Purchasing Officer
Office of the Director of Industries
Old Custom House Yard, Fort,
Bombay.

Sub: Tender No. SP.1613/28 - Core Drilling Machine.
'George E. Failing' Model '1500' Drill
complete with Operating & Coring Equipments
and Bits.

Item Number.	Quantity.	Description.
1	1	'FAILING' Model '1500' drill unit including Standard drillhead complete with hydraulic system Draw works fully enclosed, Cathead regular type, Transmission heavy duty Special drive case from take-of to drill with oil pump drive incorporated Special slush pump drive arrangement, through friction clutch & Controls. Complete hydraulic system including pump, mast raising cylinders and controls Mast 87 ft. seamless steel tubular wired for electric lights. Frame - All steel with two built in tool boxes. WITH FOLLOWING HAND TOOLS. 1 - D-1404 10" Cresent wrench 1 - D-400 Chuck wrench 1 - D-1406 Set Allen wrenches with assortment of Allen Screws 1 - XAC-6639 Alemite grease gun 1 - D-1412-A Ball-Pein hammer 1-3/4"lbs. 1 - D-1419-A 12" Mill bast. file with handle 1 - D-1414 Pair pliers 1 - D-1415 Pressure type oil can 1 - A-401-H Spanner wrench 1 - A-401-KK Spanner wrench 1 - D-1413 Screw driver with following tools for FXF 4 x 5 pump: 1 - 883-FB Liner puller 1 - 219-SF Valve seat puller 1 - 1440 Set FXF pump wrenches

Cont.....2

DATE December 6, 1948.

Item Number.	Quantity.	Parts Number.	Description.
2	1		Gardner-Denver FF-FXF 4 x 5 Duplex Power Pump
3	1		Failing Heavy duty split shaft power take-off
4	1		Jaw Clutch type and reel, drive & controls
5	1		D-1493 4-1/2" swivel base vise with mountings breacket
6	1		Automatic Pulldown for 2-3/8" kelly
7	1		International KBS-6 truck, with KB-7 BLD-269 engine, 156" wheelbase, 8.25 x 20 x 10 ply tires, single front, dual rear
8	1		ONAN Model 68AL13 - 600 Watt. 110 volt DC light plant.
9	1		Spare 8.25 x 20 x 10 ply tire and tube
		OPERATING EQUIPMENT	
10	1	15066-204	2-3/8" OD x 17" FAILING round patented three flute kelly.
11	1	S-368	Sub from 2-3/8" kelly to "N" Acme Rod Pin
12	1	14066	2-3/8" kelly drive bushing with heat treated drive bushing pins for 2-3/8" kelly
13	1	S-1025	Heavy duty water swivel
14	1	S-1034-NL	Sub from water swivel to 2-3/8" kelly
15	1	D-1402	1-1/4" x 17' Hi-pressure Wire inserted swivel hose complete with boss male fittings (to be used with 27' mast)
16	1	D-1401-H	3" x 20' Suction hose complete with male fittings, strainer & Evertite quick coupling unit for 4 x 5 pump
17	1	D-1400	1" x 65' Moisture proff catline, manila (to be used with 27' mast)
18	1	D-1285-A	1/2" x 125' Non-spinning drum line with D-1373 heavy duty safety clevis (to be used with 27' mast)
19	1	D-1286	3/8" x 1100' plow steel sand reel line with D-1373-A clevis & D-1284 swivel socket
20	1	H-125	Heavy duty hoisting plug with H-129-D coupling to be used with 'N' Acme Rods
21	1		2-3/8" light weight center latch elevator with links and rings for 2-3/8" exploratio drill pipe.
22	2		2-3/8" Rotary tongs for 3" OD toll joint on 2-3/8" exploration drill pipe.
23	1	1-825	Failing single travelling block wi safety clevis for drillin line.

Item Number.	Quantity.	Parts Number.	Description.
2	1		Gardner-Denver FF-FXF 4 x 5 Duplex Power Pump
3	1		Failing Heavy duty split shaft power take-off
4	1		Jaw Clutch type and reel, drive & controls
5	1		D-1493 4-1/2" swivel base vise with mountings breacket
6	1		Automatic Pulldown for 2-3/8" kelly
7	1		International KBS-6 truck, with KB-7 BLD-269 engine, 156" wheelbase, 8.25 x 20 x 10 ply tires, single front, dual rear
8	1		ONAN Model 68AL13 - 600 Watt. 110 volt DC light plant.
9	1		Spare 8.25 x 20 x 10 ply tire and tube
			OPERATING EQUIPMENT
10	1	15066-204	2-3/8" OD x 17" FAILING round patented three flute kelly.
11	1	S-368	Sub from 2-3/8" kelly to "N" Acme Rod Pin
12	1	14066	2-3/8" kelly drive bushing with heat treated drive bushing pins for 2-3/8" kelly
13	1	S-1025	Heavy duty water swivel
14	1	S-1034-NL	Sub from water swivel to 2-3/8" kelly
15	1	D-1402	1-1/4" x 17' Hi-pressure wire inserted swivel hose complete with boss male fittings (to be used with 27' mast)
16	1	D-1401-H	3" x 20' Suction hose complete with male fittings, strainer & Evertite quick coupling unit for 4 x 5 pump
17	1	D-1400	1" x 65' Moisture proff catline, manila (to be used with 27' mast)
18	1	D-1285-A	1/2" x 125' Non-spinning drum line with D-1373 heavy duty safety clevis (to be used with 27' mast)
19	1	D-1286	3/8" x 1100' plow steel sand reel line with D-1373-A clevis & D-1284 swivel socket
20	1	H-125	Heavy duty hoisting plug with H-129-D coupling to be used with 'N' Acme Rods
21	1		2-3/8" light weight center latch elevator with links and rings for 2-3/8" exploration drill pipe.
22	2		2-3/8" Rotary tongs for 3" OD toll joints on 2-3/8" exploration drill pipe.
23	1	M-225	Failing single travelling block with safety clevis for drilling line.

Item Number.	Quantity.	Parts No.	Description.	Amount.
24	1	15715-A	Failing swinging spider for 2-3/8" 'N' Acme rod only (500' capacity)	
25	1	4063-B	Set of slips for swinging spider to accommodate 2-3/8" "N" rod (diamond pt.)	
26	500 ft.	R-116	"N" Acme drill rod (2-3/8" in 10' even lengths with heat-treated patented (S-368) couplings.	
27	1	C-960-120	3½" OD x 10 ft. stabliser with 2-3/8" "N" Acme drill rod box to 2-3/8" API regular tool joint box	
28	1	S-554-B	Sub 2-3/8" "N" Acme box to 2-3/8" API regular box for rock bit connection	
29	1	S-560-B	Sub 2-3/8" "N" Acme box to 2-7/8" API regular box for coupling kelly to bits drilling down fisrst joint.	
30	1	S-564-B	Sub 2-3/8" "N" acme rod to 3½" API regular box for coupling kelly to bits drilling down first jount 36" ridgid-wrench.	
31	1	D-1394	36" Ridgid wrenches	
32	1	D-1395	24" Ridgid wrenches	
33	1	D-1396	18" Ridgid wrenches.	
		RECOMMENDED DRILLING BITS TO BE USED with 2-3/8" "N" ACME DRILL RODS.		
34	2	6NA0	6" Failing fishtail bits (Hard surfaced)	
35	4	4NA8	4½" " " " "	
36	6	3NA14	3-7/8" " " " "	
37	4	3NA14P	3-7/8" " Pilot bits (hardsurfaced)	
38	4	2NA14	2-7/8" Failing Fishtail bits "	
39	2	2NA14P	2-7/8" Failing Pilot bits	
40	6	238RM314	3-7/8" Roller rock bits medium formation.	
		CORE BARREL EQUIPMENT.		
41	2	CB-22-5	5' long 4" Single tube with extension and detachable head	
42	2	CB-44-10	10' long 6-7/8" Single Tube core barrel	
43	2	B526	Bortz set Diamond bits for CB-22-5	
44	2	B605	Bortz set diamond bit for CB-44-10	
45	1	CB-14-10	"N" single tube core barrel for removing 2" core.	
46	1	B-21-5	Bortz set diamond bit for CB-14-10	

Cont... 4.

Item Number.	Quantity.	Parts Number.	Description.	Amount.
47	6	B-21-S	"N" Single tube core bits, set with Haystellite inserts guage 2-15/16"	
48	6	B-312-S	"N" Core lifters for same	
49	1	CB-1310	"N" Bottom discharge core swivel type core barrel for removing 1¾" core.	
50	4	B-2551-S	"N" Bottom discharge core bits set up guage 2-15/16"	
51	4	B-2552-S	"N" Core lifters (for B-2551-S)	
52	2	B-2782-S	Upper wear ring for same	
53	1	B-2783-S	Lower wear ring for same	
54	1	B-2781-S	Lifter shell for same	
55	1	B-2780-S	Inner extension	
56	1	B-2542	Core shell	
57	1		Parmalee wrench (2-3/4")	
58	1		Parmalee wrench (2-1/8")	
			TOTAL	Rs.1,39,560
			Recommended spares for two years normal operation (as per list attached)	Rs. 36,213/4/0
			Grand total	Rs.1,75,773-4-0
			Note: Additional for International KBS-7, Truck 146" wheel base with Buda 6DT-317 Diesel Engine 8.25 x 20 x 10 ply tires, single, front dual rear (in place of item No.7 above)	Rs. 12,260-0-

1,88,033

TERMS & CONDITIONS:

Price: The price quoted above is approximate, ex our godown, Bombay; but subject to change, if any price increases are announced by our Principals prior to acutal shipment.

The price quoted above is inclusive of 10% customs duty, which is the present rate. However, should there be any change in the rate of Customs Duty when the equipment arrives, it will be for your account.

Import Lincence: We shall undertake to apply for the Import Licence on your behalf and request you to kindly send us a letter in duplicate to the effect that the equipment is to be imported against your order.

Payment: 90% of the contract price to be paid against surrender of the following documents:

1) Ocean Bill of Lading
2) Invoice made up according to contract.
3) Insurance Certificate.
4) Undertaking to arrange for clearing according to contract.

Against a confirmed irrevocable credit to be established with Chartered Bank of India, Australia, & China, Bombay for 90% of the contract value as established approximately at the time of placing the contract, the order will not be considered firm until this credit has been opened.

NOTE: Credit with Imperial Bank of India, Bombay, or other recognised Bank will be equally acceptable.

ALTERNATIVELY: At the time of placing the order 90% of the entire contract amountto be placed on deposit with Chartered Bank of India, Australia & China, Bombay, or Imperial Bank of India, Bombay, or other recognised Bank, in cash, to be available against surrender of the same documents as mentioned above.
Balance of 10% to be paid against Railway Receipt.

Clearance: Documents, as obtained by the customer on payment of 90% of the contract price, to be returned to Larsen & Toubro Limited, for purpose of clearing the consignment through Customs, and arranging railing the same.

Acceptance: This contract does not take effect upon Sellers unless and until the Letter of Credit as described above has been opened.

Delivery: Our Principals have indicated to us that shipment of the goods covered by your order can take place approximately three months after confirmed irrevocable Letter of Credit has been established.

Spare Parts: We strongly recommend you to order out initially with the Drill, essential spares parts, as recommended by Manufacturers, for one to two years satisfactory service. We shall supply you the list of essential spare parts required and their prices, upon your request.

Service: On receipt of the Drill at the destination, we shall depute a competent Serviceman to assist you in putting the equipment to work and to train your field staff for a period of 2 to 3 weeks in proper operation and maintenance of the equipment.

IJC:
pmLkr.

for LARSEN & TOUBRO LIMITED

LARSEN & TOUBRO LIMITED.
P. O. BOX 278,
INDIAN MERCANTILE CHAMBERS,
NICOL ROAD
BALLARD ESTATE,
BOMBAY.
"CATERPILLAR" DIVISION

B/3103/O

December 9, 1948

Rao Bahadur N.S. Joshi
B.E., M.I.E., M.R. San.I.
Superintending Engineer
Special Investigation Circle
Dharwar.

Dear Sir:

'Failing' Model '750' Holemaster Drill complete with Operating & Coring Equipments and Bortz Set Diamond Bits.

We acknowledge with thanks receipt of your letter No.G.111 dated 6th instant.

We are sorry, as promised by us, our Mr. Finar Larsen could not so far call on you as he had to go from Bangalore urgently to Calcutta in connection with some important job with the Damodar Valley Corporation. However, he is expected back very soon and as soon as he comes to Bombay we shall arrange for his visit to your place and shall inform you the date of his arrival in advance.

Based upon the discussion our Mr. A.C. Parker had with your Deputy Engineer during his visit to Bombay we have prepared our quotation for a '750' Holemaster Drill complete with Operating and Coring Equipments and Bortz Set Diamond Bits. It was our intention to hand over this quotation personally to you when you would visit us on the 3rd. of this month. However, we now understand that due to some urgent job at your end you are not able to come to Bombay. We therefore now enclose herewith our quotation for the '750' Holemaster Drill which we trust you will find in order.

As regards the drilling speed of our 'Failing' Drills we wish to state that purely for estimate purposes, you can expect approximately 25 to 100 ft. per hour in formations of alluvial nature and approximately 5 ft. per hour formations of average hard rock depending upon the exact density of the formations encountered and the efficiency of the operator.

Regarding delivery, we wish to state that the present productive capacity of our Principals of this model of drill is two to three numbers per month. As we have already booked some orders for other customers the earliest delivery we can at present give us is to ship one '750' drill in early February -

December 3, 1948

March, 1949. To enable us to keep this delivery we request you to kindly confirm your order as early as possible.

Trusting that you will find the above information in order and always with pleasure at your service, we are,

Yours faithfully,
for LARSEN & TOUBRO LIMITED

Sd.

Encl: Quotation:

I.M. GHOULS =

FE:
pc:kr.

(TRUE COPY)

"CATERPILLAR" DIVISION

December 8, 194[redacted]

Rao Bahadur N.G. Joshi
B.E., M.I.E., M.R.San.I.
Superintending Engineer
Special Investigation Circle
Dharwar

'FAILING' Model '750' Drill complete with
Operating and Coring Equipments & Bits.

Item Number.	Quantity.	Description
	1	'FAILING' Model '750' drill unit including Drillhead complete with hydraulic system Double drum draw works, Transmission, Sub-drive case, Oil Pump Mast 26 ft. capacity 20,000 lbs complete with hydraulic raising system and wired for electric lights. Failing L-100 4½x5 duplex pump Frame - All steel electric welded light weight construction with two built in toll boxes.

HAND TOOLS INCLUDED WITH DRILL

1 - A-400 Chuck wrench
1 - A-401-H Mast cylinder gland spanner wrench
1 - D-1404 10" adjustable wrench
1 - D-1406 Set allen wrenches and assortment of allen set screws.
1 - D-1412-A 1¼ lb. Ball Pein Hammer
1 - D-1413 Screw driver
1 - D-1414 Pair Pliers
1 - D-1415 Pressure type oil can
1 - D-1419-A 12" Mill bast. file with handle
1 - D-1440-D Set pump wrenches
1 - D-1622 7 ton hydraulic jack
1 - F-963 Liner puller for pump
1 - F-968 Valve cage puller body
1 - F-964 Valve seat puller for pump
1 - XAC-6639 Alemite grease gun

Cont....2

Item Number	Quanity	Parts No.	Description
2	1		Automatic pull down to accommodate 2-3/8" kelly
3	1		ONAN Model 6B AL13 - 600 watt. 110 volt D.C. light plant
4	1		D-1493 4½ swivel base vise with mounting brakcet
5	1		Dodge Model WDX one-ton Power Wagon including deluxe cab, high charge generator, right and left hand mirrors, replaceable type oil filter, two hooks (FWD) power take-off, radiator overflow tank, rear shock absorbers, 9.00 x 16 tires, winch assembly, fish-plated frame and extra heavy duty front and rear springs.
			OPERATING EQUIPMENT
6	1	15065-204	2-3/8" ODx17' long round three grooved kelly
6A	1	S-368	Sub from 2-3/8" kelly to "N" Acme Rod Pin
7	1	14066	Kelly drive bushing with three 3066-3 heat treated drived bushing pins (patented)
8	1	S-985	Tear drop 1¼" water swivel
8A	1	S-1304NL	Sub from water swivel to kelly
9	1	D-1402	1½" x 17' Hi-pressure wire inserted hose complete with hossmale fittings.
10	1	D-1401-B	3"x20' Suction hose complete with male fittings, D-1345-C strainer and Evertite quick coupling unit
11	2	D-1285	½"x80' Non-spinning drum line with safety clevis (D-1373-B)
12	1	H-115	Hoisting plug with S-358 coupling
13	1	75715	Failing swinging spider complete with one set "N" drill rod slips (4063-B)
14	500 ft.	R-116	"N" Acme drill rods (2-3/8") flush joint in 10' even lengths and including S-368 heat treated couplings.
15	1	D-1394	36" Ridgid wrenches
16	1	D-1395	24" Ridgid wrenches
17	2	D-1396	18" Ridgid wrenches

Cont.....3.

Item Number.	Quantity.	Parts Number.	Description.	Amount.
18	2	6 NA0	6" Fishtail bits (hardsurfaced)	
19	2	4NA0W	4" Rushing bits (")	
20	2	4 NA8	4½" Fishtail bits (2)	
21	1	S-554-B	Sub 2-3/8" "N" Acme box to 2-3/8" API regular box for rock bit (size 3¾" - 4½")	
21A	1	S-560-B	Sub 2-3/8" "N" Acme box to 2-7/8" API regular box for rock bits (4-5/8"-5")	
21B	1	S-564-B	Sub 2-3/8" "N" Acme box to 3½" API regular box for rock bits (size 5-1/8" - 7½)	
			CORING EQUIPMENT.	
22	1	CB-14-10	"N" Single tube core barrel for removing 2" core.	
23	1	CB-22-5	5' long 4" Single Tube with extension and detachable head.	
24	1	B-526	Bortz set bit for CB-22-5 core barrel	
25	1	B-21-S	Bortz set bit for CB-14-10 core barrel	
26	1	ØB-21-S	"N" Single tube core bits, set with heystellite inserts Gauge 2-15/16"	
27	6	B-312-S	"N" Core lifter for same	
28	7	B-1542-S	Core sheel	
29	1	CH-13-10	"N" Bottom discharge swivel type core barrel for removing 1¾" core.	
30	4	B-2851-S	"N" Bottom discharge core bits set up, guage 2-15/16"	
31	4	B-2552-S	"N" Core lifters for same	
32	2	B-2782-S	Upper wear rings for same	
33	2	B-2783-S	Lower wear ring for same	
34	1	B-2881-S	Lifter shell for same	
35	4	B-2780-S	Inner extension	
36	1	S-312	*Sub, "N" Acme box to "N" standard pin.	

* This sub will be needed with either barrel above (item No.22 & 29) for connecting 'N' 4 thread in top barrels)

Grand total Rs. 83,000/-

NOTE: Extra for mounting the Drill on International KB5 Truck with Buda 6BD-273 Diesel Engine (in place of item No.5) Rs. 6,600/-

~~89,400~~

TERMS & CONDITIONS:

Price: The price quoted above is approximate, ex our godown, Bombay; but subject to change, if any price increases are announced by our Principals prior to actual shipment.

The price quoted above is inclusive of 10% customs duty, which is the present rate. However, should there be any change in the rate of customs duty when the equipment arrives, it will be for your account.

Import Licence: We shall undertake to apply for the Import Licence on your behalf and request you to kindly send us a letter in duplicate to the effect that the equipment is to be imported against your order.

Payment: 90% of the contract price to be paid against surrender of the following documents:

1 Ocean Bill of Lading
2 Invoice made up according to contract.
3 Insurance Certificate
4 Undertaking to arrange for clearing according to contract.

Against a confirmed irrevocable credit to be established with Chartered Bank of India, Australia, & China, Bombay, for 90% of the contract value as established approximately at the time of placing the contract, the order will not be considered firm until this credit has been opened.

NOTE: Credit with Imperial Bank of India, Bombay, or other recognised Bank will be equally acceptable.

ALTERNATIVELY: At the time of placing the order 90% of the entire contract amount to be placed on deposit with Chartered Bank of India, Australia & China, Bombay, or Imperial Bank of India, Bombay, or other recognised Bank, in cash, to be available again surrender of the same documents as mentioned above.

Balance of 10% to be paid against Railway Receipt.

Clearance: Documents, as obtained by the customer on payment of 90% of the contract price, to be returned to Larsen & Toubro Limited, for purpose of clearing the consignment through customs, and arranging railing the same.

Acceptance: This contract does not take effect upon Sellers unless and until the Letter of Credit as described above has been opened.

Delivery: Our Principals have indicated to us that shipment of the goods covered by your order can take place approximately three months after confirmed irrevocable Letter of Credit has been establishe

Spare Parts: We strongly recommend you to order out initially with the Drill essential spares parts, as recommended by Manufacturers, for

December 8, 1948.

one to two years satisfactory service. We shall supply you the list of essential spare parts required and their prices, upon your request.

Service: On receipt of the Dr'll at the destination, we shall depute a competent Servicemen to assist you in putting the equipment to work and to train your field staff, for a period of two to three weeks in proper operation and maintenance of the equipment.

ELi
pc:kr.

for LARSEN & TOUBRO LIMITED

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81

LARSEN & TOUBRO LIMITED.

ENGINEERS.

Branches at:
CALCUTTA: 8 ROYAL EXCHANGE PLACE
MADRAS: 120 ARMENIAN STREET
KARACHI: McLEOD ROAD, P. O. Box 757
TELEGRAMS: "LARSENBRO" BOMBAY,
Codes: ACME, BENTLEY & BENTLEY'S 2nd,
PHONE: 32946 (2 Lines)

"CATERPILLAR" DIVISION

LLOYD BUILDING
DOUGALL ROAD,
BALLARD ESTATE
P. O. BOX No. 278

IN REPLY PLEASE QUOTE
3/3421/0

BOMBAY,

December 16, 1948

The Secretary to Government Public Works Department
BOMBAY

Dear Sir:

Sub: 'Failing' Holemaster Drill complete with Operating & Coring Equipments and Bortz set Diamond Bits.

p 53

We beg to refer to letter No.G.111 dated 12th instant from the Superintending Engineer, Special Investigation Circle, Dharwar, under copy to us. As requested by the Superintending Engineer, we are sending herewith copies of our letters No. 3/2972/0 dated 7th instant addressed to the Asstt. Stores Purchasing Officer, Bombay, enclosing our quotation for 'Failing model '1500' Holemaster Drill and letter No.3/3103/0 dated 9th instant addressed to Rao Bahadur N.S. Joshi, Superintending Engineer, Dharwar, enclosing our quotation for 'Failing' model '750' Holemaster Drill.

Trusting that you will find the above in order and always with pleasure at your service, we are,

Yours faithfully,
for LARSEN & TOUBRO LIMITED

= EINAR LARSEN =

Encl:

CC: The Superintending Engineer,
Special Investigation Circle
Dharwar.
With reference to copy of ~~this~~ his letter No.G.111 dated 12th instant. Our Mr. Einar Larsen is leaving Bombay on the 17th instant to see you personally and discuss the matter of purchasing 'Failing' Drills for your purpose.

EL:
pc:kr.

Comparative quotations of compressors and rock drills.

S.No.	Item	M/s.Khanna & Co.	M/s.Ingersoll Rand.	M/s.Consolidated Pneumatic Tools Co.
1.	Compressor 315 cft.	29,964	30,675	31,200
~~2.~~	~~" 365 "~~			
3.	Sinker drills 45 lbs.	1,210	1,095	1,015

Superintending Engineer,
Special Investigation Circle.

RGY/20.12
Compd.by:

Pneumatic machinery proposed to be ordered.

S.No.	Description.	Capacity.	Name of firm.	No. to be ordered immediately out of the quantities required
1(a)	Air compressors (C.P.T.)	315 cft.	M/s.Consolidated Pneumatic Tools Co.	2
(b)	-do- Gardener Denver make	-do-	M/s.Larsen & Toubro.	4
2.	Sinker drills	45 lbs.	M/s.Consolidated Pneumatic Tools Co.	4
	-do-	45 lbs.	M/s.Larsen & Toubro	8
3.	Drill sharpeners	-	-do-	1
4.	Steel rods hexagonal.	For the above drills.	M/s.Consolidated Pneumatic Tools Co.	2 tons
	-do-	"	M/s.Larsen & Toubro	4 "
	Do	Do	Mem. Safety Rods	2 Tons.

RGY/23.12
Compd.by:

Superintending Engineer,
Special Investigation Circle.

8'/

No.G-111/1. Office of the Superintending Engineer,
Special Investigation Circle,
Dharwar, 23rd. December 1948.

To

The Secretary to Government,
Public Works Department, Bombay.

Subject:- Machinery for the construction of the Ghataprabha Left Bank Canal.

d.d. he No. 6572/36 (K) P.W. VIII

Reference : Government endorsement No.6572/36-Con., dated the 3rd December 1948.

2. - From the lists received with Government endorsement referred to above, it is seen that plant and machinery either allotted to or ordered out for Ghataprabha Left Bank Canal -- Project so far, include mostly earth moving machinery. As the Ghataprabha Left Bank Canal involves much of cutting in hard rock, it is essential that pneumatic tools, and air compressors must also be secured simultaneously, to enable the work being started as early as possible.

3. I had a discussion with the Chief Engineer for Irrigation, P.W.D., Bombay on the 28th November 1948 from whom it is ascertained that if the machinery could be purchased in India from firms having ready stock for sale, the question of dollar exchange could be obviated and it would not be necessary to place the order through the Government of India.

4. As air compressors and pneumatic tools are also required urgently, I made enquiries with the firms and have found that the following articles are immediately available in India from ready stock as shown below :-

S.No.	Description of the plant.	Capacity.	Name of the firm.	No.available.	No required
1. (a)	Air compressors (C.P.T.make)	315 cft.	M/s.Consolidated Pneumatic Tools Co.	6	6
(b)	-do- (Gardener Denver make)	365 "	M/s.Larsen & Toubro Ltd	2 (sold)	
2.	Sinker drills	45 lbs	M/s.Consolidated Pneumatic Tools Co.	24	24
	-do-	-do-	M/s.Larsen & Toubro Ltd.	13	
3.	Drill sharpeners		-do-	2	1

The above statement may further be supplemented by the following as Messrs.Larsen & Toubro offer to supply these at 8 to 10 weeks' notice and in Indian currency.

			No.available
Compressors	315 cft/minute	M/s.Larsen & Toubro Ltd	Any number

4. A statement showing the comparative quotations obtained from the following firms is enclosed herewith.

1) Messrs.Consolidated Pneumatic Co.
2) Messrs.Ingersoll Rand
3) Messrs.Khanna & Co.

On asking Messrs.Larsen & Toubro for quotations, they rightly pointed that as rates changed from month to month a quotation

was hardly useful. At the same time ~~he~~ stated that their rates for compressor and drills were the same. Actually comparing the different ~~indices~~ and costs directly is hardly fair as there are important differences in them, e.g. the compressors of Larsen & Toubro (Gardener & Denver make) is water cooled and suitable for India while that of others is air cooled. In any case the costs of similar items quoted by different firms are comparable and there is not much to choose. We should guide ourselves by the quality and our needs and not by mere quotations. I, therefore, request you to please obtain permission of Government to place an order for machinery mentioned above ~~(col. 6)~~ as per list attached.

5. In this connection, I wish to record two facts :-

(a) That unless we place orders immediately, items which are known to be available for immediate sale are already sold out. Thus e.g. the two compressors of Larsen & Toubro item 1(b) above were available a few days before I drafted this letter but have been sold out by the time I signed it. It is, therefore, essential to have the procedure of purchase simplified.

(b) The existing procedure of purchase is very elaborate and results not only in waste of useful time but also in unnecessary correspondence. The procedure requires the Executive Engineer and the Superintending Engineer to make enquiries to choose the type and to prepare comparative statements and then to submit proposals for purchase to the Chief Engineer, P.W.D. who then passes on the order to the Director of Industries.

That officer, instead of placing the order, again calls for quotations or asks this officer for further clarification. I do not know what technical staff he has but understand that he is not fully manned in that respect.

All this results in waste of time, energy and increase of correspondence. On the other hand, the location of responsibility of purchasing the right material is not known and this is likely to lead to unhappy results.

If even so it is essential to place the orders through the Director of Industries and Stores Purchasing Officer, the same may be done.

Superintending Engineer,
Special Investigation Circle.

D.A.2 statements.

65 72/36(2)

72097

From:

Rao Bahadur N.S.Joshi,
B.E.,M.I.E.,M.R.San.I.,
Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar.

To:

The Chief Engineer,
Jaipur State,
JAIPUR.

No. G-111

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 29th Jan.1949.

Subject: "Failings Core-Drilling Machine."

Sir,

The Government of Bombay were advised by Messrs. Larsen & Toubro of Bombay to purchase a "Failings Core-Drilling Machine" for drilling holes for foundations of Dams. The cost of the machine is very high and it was considered essential to have opinions about it-s performance where it was used.

2. I was informed that one "Failing 750" Core Machine was in use at Jaipur. I would be thankful for being informed of the site where it is working and where I could see it. In case you are in a position to give an opinion on its working, I will be obliged.

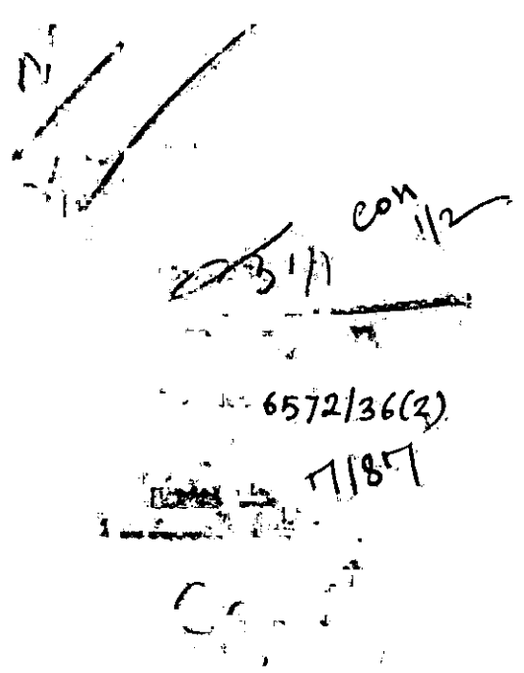
3. Kindly also inform me the name of the officer in charge, with full address.

Yours faithfully,

Superintending Engineer,
Karnatak Irrigation Circle.

BR/28-1.
Compd.by:

Copy forwarded with compliments to the Secretary to Government, P.W.D., Bombay.



Extract (Para 4, 5 & 8) of letter No.G-111 ~~address~~ dated 28/1 January 1949 addressed to Messrs. Larsen & Toubro Ltd., Engineer, P.O.Box No.278, regarding "Equipment for land clearing and loading."

---o---

" 4. I also wanted to know whether and if so where in India I could get a demonstration of the Hole-Master" 750 Failings". I was sorry to hear nothing about it. Unless I could see a demonstration, I was not prepared to purchase.

In case it is not working anywhere in India but if it is working outside India, I want to be informed of the site (e.g., in America) where it could be seen actually working.

Actually I understand that there is one at Jaipur (lying idle). Can you verify this and arrange to give a demonstration there, in any hard rock? I suppose it was sold by you. Can you let me know why it is not working ?

5. In case you could not give demonstration of any machine, I suggested to your Mr.Larsen whether your firm would be prepared to sell on certain conditions e.g., return after one year if working is not satisfactory, or a 60% payment, the remaining being paid only after it gives results as expected. I am sorry nothing is heard about this either.

8. Still another difficulty regarding your letters, as well as your literature, is that nowhere is the

horse-power .....

horsepower stated; while D8 and D7 may be suitable as Trade Names for your purposes, it is essential for us to know such information as Horsepower.

In your future correspondence, therefore, I request you to please state the H.P. so as to allow comparison.

* * * "

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No. G-111/1

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 28th Jan.1949.

Copy of extracts of paras 4, 5, & 8 of letter No. G-111 dated the 28th January 1949 addressed to ~~the~~ Messrs. Larsen & Toubro Ltd., P.C.Box.278, Bombay, forwarded with compliments to the Secretary to Government of Bombay, Public Works Department for information.

2. I request you to please read these proposals. I think it will be a mistake to purchase costly machinery without a demonstration. Where a Demonstration is not possible in India, they should accept conditions ~~(B)~~ in para 5.

Con. B 1/1/12
No D.
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BR

Superintending Engineer,
Karnatak Irrigation Circle.

BR/28-1.
Compd.by:

REPORT.

7th January, 1949

SUB: Gangapur Storage Division,
Nasik.

I arrived at Nasik and immediately went to see Mr.S.G.Mehta, Executive Engineer, He was to go to Poona the next day, but told me to see Mr.P.G.Hiremath, S.D.O., Mechanical Sub-Division. Mr.S.G.Mehta told me that he had not ordered any material and will not order any himself, as he was on the eve of transfer, with Mr.G.G.Dhanak coming back from a tour of the U.S.A. Mr.Mehta said that all previous orders were placed directly by Mr.Dhanak before his departure to the States. He did not know the reason why.

It turned out that the P.A. to the Executive -- Engineer and the S.D.O. Construction Sub-Division (Messrs. E.C.Saldanha and C.C.Balekundri) were friends of mine and I saw them the same night. They said that no quotations had been called for but Messrs.Larsen & Toubro had quoted for their Model 365 Compressor. Mr.Dhanak was on the verge of placing the order with them, when Mr.Khanna arrived about the middle of May and in two days obtained orders for the following :-

1. Three - 105 cu.ft. Portable Compressors.

2. Two - 210 cu.ft. Portables.

3. Two - 315 Cu.ft. Portables.

4. Two - K20 Wagon Drills.

The above details was confirmed later by Mr.Hiremath and I personally saw the Portables in the Office yard. The Wagon Drills were on the way from Bombay.

On the 12th of December, I saw Mr.Hiremath. He told me that Mr.Dhanak had recommended this make (LeRoi) as they were very popular in America. (This was before Mr.Dhanak went to America).

Mr.Hiremath asked me about Detachable Bits and Rods to enable him to start work with 6-JB4 machines, which were purchased from I.R. He also wanted a Sharpener. I asked him why they had ordered machinery from some unknown firm and when they found they could not get Sharpeners and steel from that firm expected others to rush around for these and undertake supply of steel.

I feel that the whole business is highly irregular for the following reasons:-

1. No enquiries had been invited or tenders issued.

2. No reply was sent to our letter of 21st May '48 asking them their requirements; so far as I can gather no other established firm was invited to quote either.

3. Incomplete equipment was ordered in a hurry. There is no reason for their hurrying to get Compressors and Wagon Drills, while no thought was given to Drill Sharpeners or steel which is still not ordered. If Mr.Dhanak was to go to U.S.A., to study the machinery and methods, Government should have waited till his return before buying machinery on his recommendation.

4. An unknown firm without even an office in Bombay is given the orders for the material and Government gladly undertook to take delivery in Bombay to suit the firm's convenience.

5. I am told that the Mechanic who came to give a running trial of the Compressor was handling the type and make of machine for the first time. The service such a firm can give, especially when their only office is at Delhi can be imagined.

6. I am told by Mr.Pednekar, Stores Purchasing Officer that Mr.Dhanak was given special permission to order machinery in this manner "because of urgency". Mr.Pednekar had strongly opposed this action.

7. Government Officers must, especially for supplies involving large amounts of money, here over Rs.1,50,000/-, issue public enquiries and tenders if they wish to order directly. They may proceed further as they like, but comparative figures regarding price, delivery etc., must at least be prepared before favouring any supplier. In fact, according to recent orders even the provincial government is not to order large supplies directly, but only through I.S.M. or D.G.I.& S., who, of course, always call for offers from all interested parties.

"True copy"

Head Clerk
to the Superintending Engineer, K.I.C.

RGY/28.1
Compd.by:

95

Confidential
No. G-111

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 29th Jan. 1949.

To

The Secretary to Government,
Public Works Department,
Bombay.

Subject: Machinery required for the Ghataprabha Left Bank Canal
Purchase of...

While discussing purchase of machinery with a certain firm, the agent questioned me as to why the procedure followed in this Circle was so dilatory when that followed for Gangapur Project was on totally different lines.

2. On being asked to confirm his statement in writing, he has submitted a complete note, which includes points which I thought, I should bring to your notice. I am not at all sure that it may not be an exaggeration.

3. As the said person is likely to quote this as a serious (but a typical) irrâgularity in the P.W.D., I am sending you a copy of the Note. I will report the name of the signatory, if you so desire.

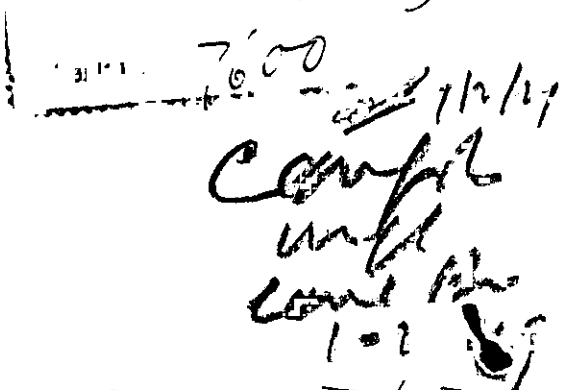
This must be in connection with the Consolidated Pneumatic Tool Co. and the prospective supplies. 1/2/49

D.A: copy of note.

Superintending Engineer,
Karnatak Irrigation Circle.

BR/28-1.
Compd.by:

6572/36(2)



No. G.111

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 5th Feb.1949.

To

The Director of Industries
& Stores Purchasing Officer,
Old Custom House Yard,
Fort, Bombay.

Subject: Machinery for Rock core-drilling
"Failing's Calyx No." p.43

Reference: (1) This office No.G-111 dated 18th Nov.1948, addressed to the Secretary to Government, P.W.D.Bombay. p.48
(2) This office No.G-111 of 11-12-1948 and
(3) -do- addressed to you dated 24-12-1948.

2. Please let me know how the matter stands as matter is urgent.

Superintending Engineer,
Karnatak Irrigation Circle.

Copy with compliments to the Secretary to Govt., P.W.D., Bombay.

Copy to the Executive Engineer, Ghataprabha Left Bank Canal Division, Dhupdal

Copy to the Executive Engineer, Irrigation Projects Division (South), Belgaum.

BH/4-2.
Compd.by:

COM
9/2

P. W. D.
File No. 6572/36(2)
Serial No. 9101

Cont. Par
8.2.45

LARSEN AND TOUBRO LIMITED
ENGINEERS
"Caterpillar" Division

Lloyd Building,
Dougall Road,
Ballard Estate,
P.O.Box.278

Bombay, 4th Feb.1949.

Superintending Engineer,
Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar.

Dear Sir,

Subject: "Failing" Model '750' Sizmo
Drill for Coring purposes.

We acknowledge with thanks receipt of your letters of even number dated 23rd and 28th January 1949.

Your letter dated 23rd January: (3) The place to see our Failing 750 Drill in operation will be at the Damodar Valley Corporation's drilling site, and as I am now going there on the 5th instant for starting up the first drill out of the three they have purchased from us, you will very soon have the opportunity to go there yourself or to send one of your assistant engineers for the inspection of the drill in question. However, I shall write to you from the drilling site as soon as the drill is started up and I shall be pleased to arrange accommodation for your goodself or your assistant.

A

(4) Replacement of worn out diamond bits and lost diamonds:- The arrangement for having the diamond bits reset will be as follows:- Initially you should purchase from us a certain amount (say 50 numbers) of diamond bits or smaller amount, depending upon your requirements, and after having used half the amount of the bits, you should return the same to us in Bombay and we will arrange to have the same reset in U.S.A. at your cost. Until the time we receive back the first batch of bits duly reset, you will be able to use the remaining bits and vice-versa. Only experience can tell the cost for resetting these bits, as it will depend upon the number of carats of diamonds required to be replaced and the price for the carat of diamond varies according to the quality. You can, however, trust that we will keep you supplied with diamond bits at any time.

Your letter dated 28th January:-(3) I am having the Photographs for sites of dams made up and shall send them to you as soon as possible, but regret that the films have not turned out to be very good.

(4) As I already explained, you will have the opportunity to see the three drills in operation at the Damodal Valley Corporation's drilling site, and I shall add that you will also have a chance to see another drill working in Udaipur very soon.

The.....

The drill we supplied to Jaipur is at present drilling an average of two tube ~~xxxxx~~ wells a week, but no coring job is being done at present. I will also soon start up two more '750' Drill in U.P., but as they are going to use these drills only for tube well drilling, I do not know whether you will be interested to see the same or not.

(5) I trust that the above will fully convince you that our drills are quite capable of doing your job to your entire satisfaction, and therefore it will be greatly appreciated if you will place your order for the drill with us on the same terms of payment as we have quoted in our quotation, viz.

Payment:- 90% of the contract price to be paid against surrender of the following documents:

1 Ocean Bill of Lading
2 Invoice made up according to contract
3 Insurance Certificate
4 Undertaking to arrange for clearing according to contract,

against a confirmed Irrevocable Credit to be established with Chartered Bank of India, Australia & China, Bombay, for 90% of the contract value as established approximately at the time of placing the contract, the order will not be considered firm until this credit has been opened.

Note:- Credit with Imperial Bank of India, Bombay or other recognized Bank will be equally acceptable.

Alternatively:- At the time of placing the order 90% of the entire contract amount to be placed on deposit with Chartered Bank of India Australia & China, Bombay or Imperial Bank of India, Bombay, or other recognized Bank in cash, to be available against surrender of the same documents as mentioned above.

Balance of 10% to be paid against Railway Receipt.

For your information, we have booked so far a good number of orders for various drills from different parties, both Government and private, on these terms, and I hope you will also be good enough to agree for the same.

Drilling crews: If desired by you, we shall do our best to get you a good experienced Diamond driller for operating your drill and as already stated, we will also assist you, free of charge, for a period of two to three weeks for starting up the equipment and training your drilling crews in the proper maintenance and operation of the drilling equipment.

If you need any further information, please do not hesitate to call on us and we will be only too pleased to furnish you with the same and we feel that ~~before finar~~ before finalizing your purchase of the equipment in question another meeting should be arranged between you and the undersigned so as to make sure that you get the exact equipment suitable for your purpose.

Always with pleasure at your service, we are,

Yours faithfully,
for LARSEN AND TOUBRO LIMITED

Sd/ Finar Larsen.

Copy...

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Below copy of letter No.3/1665/O, dated the 4th February 1949 from Messrs. Larsen & Toubro Ltd., Engineers, Bombay regarding "Failing" Model'750' Sizmo Drill for Coring Purposes.

----o----

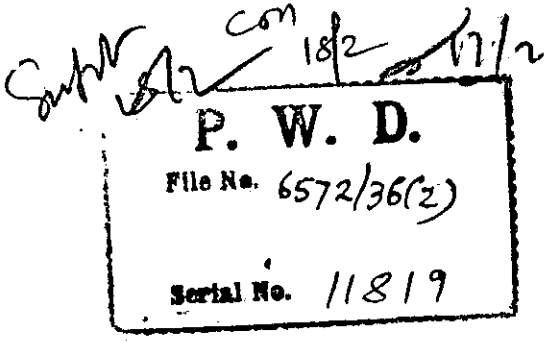
No. G-111

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 14th Feb.1949.

Copy forwarded with compliments to the Secretary to Government, Public Works Department, Bombay, for information in continuation of this office No.G-111 dated the 23rd January 1949. 87

Superintending Engineer,
Karnatak Irrigation Circle.

BR/12-2.
Compd.by:


P. W. D.
File No. 6572/36(2)
Serial No. 11819

Letter No.VN/LXF/9 dated the 8th February 1949, from Messrs.Consolidated Pneumatic Tool Co.Ltd., Hamilton House, Ballard Estate, Bombay, to the Superintending Engineer K.I.C., Dharwar.

Subject:- GHATAPRABHA CANALS.

"With reference to the above and further to the visit of our Mr.Nimbkar, we have pleasure in submitting you our offers for equipment which we trust will be suitable for completing excavations of rock cutting on this scheme in three years based on operation of two 10-hour shifts per day.

Should you however be proposing to carry out this work only at day time, you would then have to double up the equipment as offered under Items 1 to 27.

We quite appreciate that you would wish to see this equipment in operation so as to enable you to judge for yourself its performance capacities so as to arrive at a decision as to your exact requirements for completing this work within the specified time. In order to enable you to do this we are prepared to make the following special offer:-

1. We will be agreeable to deliver immediately at Bombay one complete set of Air Compressor Plant with Rock Drills, Demolition Tools, Steels, etc., so that the same could be despatched to the site as soon as the necessary railway priority assistance is arranged for.

2. We will be agreeable to place at your disposal a fully fledged Engineer to carry out this demonstration free of any cost, but with the understanding that you will arrange for his living accommodation and will further arrange to pay his railway fare from Bombay to destination and back.

3. We will be agreeable to waive our standard terms of payment in the case of this supply, namely 90% against Railway Receipt and 10% within 30 days of the date of the R/R, and accept special terms of payment, i.e. full payment within 90 days of the date of the Railway Receipt.

4. You will agree to consider the further purchase of similar equipment from us after convincing yourself that our offers are competitive.

Assuring you of our best attention, we are,"

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QUOTATION.

			RS.
1.	Five -	Model 315 Diesel portable on pneumatic tyred wheels, complete with petrol engine starter available F.O.R. Dalivery as follows :- 1 - Ex Stock 1 - Early in March 3 - End of March. Price F.O.R.Bombay Rs.31,200/- each	156,000- 0-0
		ALTERNATIVELY:-	
1A.	Eight -	Model 210 Diesel portables on pneumatic tyred wheels equipped with hand starters F.O.R.Delivery as follows:- 4 - In March 4 - In April. Price F.O.R.Bombay Rs.23,850/- each	190,800- 0-0
2.	24 -	CP/32 Dry 45 lbs. Rock drills 7/8" hex. Delivery 12 - End of February 12 - End of March. Price F.O.R.Bombay Rs.1,045/- each	25,080- 0-0
2A.	12 -	CP/42 Dry 55 lbs. Rock drills 1" hex. Delivery 6 - End of February 6 - End of March. Price F.O.R.Bombay Rs.1,065/- each	12,780- 0-0
3.	72 -	50' x 3/4" Heavy Duty lengths of hose with Rock drill type of couplings. Delivery - along with rock drills Price F.O.R.Bombay Rs.115/- each	8,280- 0-0
4.	24 -	Automatic Lubricators with 10" hose and couplings. Price F.O.R.Bombay Rs.90/- each	2,160- 0-0
5.	6 -	CP/115 Demolition Tools Price F.O.R.Bombay Rs.980/- each Delivery ex stock.	5,880- 0-0
6.	6 -	CP/111 Demolition Tools Delivery ex stock. Price F.O.R.Bombay Rs.580/- each	3,480- 0-0
7.	5 -	CP/117 Pile Drivers Delivery ex stock. Price F.O.R.Bombay Rs.1,455/- each	7,275- 0-0
8.	5 -	Tons of 7/8" hollow drill steel in random lengths of 14' - 18' Delivery ex stock. Price F.O.R.Bombay Rs.1,450/- per ton	7,250- 0-0
9.	3 -	Tons of 1" hollow drill steel in random lengths of 14' - 18' Delivery ex stock. Price F.O.R.Bombay Rs.1,450/- per ton	4,350- 0-0
10.	120 -	18" peg points for CP/115 at Rs.15/-ea.	1,800- 0-0
	60 -	24" peg points for CP/115 at Rs.18/- "	1,080- 0-0

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		Rs.
120 -	18" peg points for CP/111 at Rs.13/8/- ea.	1,620- 0-0
60 -	24" peg points for CP/111 at Rs.16 ea	960- 0-0
11.(36 & 12)	2' rods 7/8" Rs.14/- 1" Rs.16/- ea.	696- 0-0
(36 & 12)	4' rods " Rs.18/- 1" Rs.21/- ea.	900- 0-0
(18 & 6)-	6' " " Rs.22/- 1" Rs.26/- ea.	552- 0-0
250 -	Dozens of assorted bits 1.1/2" to 2" Price per dozen Rs.18/-	4,500- 0-0
12. 2 -	DS/6 Sharpeners with punching device and accessories for putting on bits and shanks on 7/8" and 1" hex. steels, also on 1.1/4" round steels, and for 1" and 1.1/8" solid steel for demolition tools. Price F.O.R.Bombay, Rs.16,600/- each Delivery ex stock.	33,200- 0-0
13. 2 -	Forges oil Fired with oil tanks. Price F.O.R.Bombay, Rs.2,150/- each Delivery ex stock.	4,300- 0-0
14. 1 -	Hot Miller Pneumatic drive with reamer attachment and 6 extra cutters. Price F.O.R.Bombay Delivery - 12/16 weeks.	8,000- 0-0
15. 1 -	Shank Grinder Pneumatic drive. Price F.O.R.Bombay	750- 0-0
16. 2 -	Bit Quench Tanks, @ Rs.350/- each Delivery ex stock.	700- 0-0
17. 2 -	Rod Quench tanks, @ Rs.350/- each. Delivery ex stock.	700- 0-0
18. 1 -	Power hacksaw with motor 400/3/50 Price F.O.R.Bombay Delivery ex stock.	1,250- 0-0
19. 1 -	Water Circulating pump, electric drive with motor Price F.O.R.Bombay Delivery ex stock.	950- 0-0
20. 1 -	Oil Quench Tank. Price F.O.R.Bombay. Delivery ex stock.	425- 0-0
21 6 -	Sump pumps. Price F.O.R.Bombay Rs.910/- each Delivery 10/12 weeks.	5,460- 0-0
22.	Complete sets of spares for engines and compressors for two years' normal working - 17% cost of compressors. Details to follow later.(Approx.cost)	26,520- 0-0
23.	Complete sets of spares for Demolition Tools and Rock Drills for normal working - 50% of cost of new Tools used per year, or for full quantity offered, approx.	27,241- 0-0

NOTE: ...

NOTE: We propose that you order out 25% of these spares now and we will order out a similar quantity on our own account and hold in stock in Bombay and make these spares available to you when your spares have been consumed. When you order out the second 50%, we will order out same again in double lot, namely one set for you and one for us. This will reduce the capital outlay and ensure the supply of necessary spares to you.

24.	2 -	"Concretors" or Cement Guns with accessories as per details attached. Price F.O.R.Bombay Rs.12,500/- each Delivery ex stock.	25,000- 0-0
25.	2 -	Double Barrel Water Tanks with 200 ft. eachm of water and air hoses. Price F.O.R.Bombay Rs.1,750/- each	3,500- 0-0
26.	5 -	Pneumatic Loaders.	
		<u>Alternatively</u>:	
26A.	5 -	Scraper Loaders operated pneumatically	
		Price approximately	90,000- 0-0

Note: We will be agreeable to show you a pneumatic Loader in operation on the Sangulam Tunnel so that you can decide this matter.

Should you however desire to see a Scraper Loader in operation, we will undertake to import one and have it demonstrated at site.

27.	6 -	Sets of 3" piping, 150 ft.long Rs.450/- 2" " 100 ft. " Rs.150/- 2" manifolds each with four air cocks. - 240/- Rs.840/-	5,040- 0-0

ALL PRICES EXCLUSIVE OF SALES TAX.

TERMS: 90% against Railway Receipt, balance within 30 days of the date of the Railway Receipt.

CONSOLIDATED PNEUMATIC TOOL CO.LTD.

Sd/-

RGY/17.2
compd.by.

111

No.G-111

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 18th February 1949.

To

M/s x x x x x x x x x

Subject:- Pneumatic machinery for excavation in rock.

Gentlemen,

I write this to inform you that the construction of miles 1 to 44 of Ghataprabha Left Bank Canal and several miles of branches for the same has now been sanctioned.

2. The most important work involved is that of excavation in hard rock (Deccan Trap or Basalt) and the quantity involved is about 700,00,000 C.ft. (Seventy million C.ft.) exclusive of over burden of softer rock, not needing pneumatic drilling etc. The section of canal varies from 60 ft. wide and 10 ft. depth to 40 ft. wide and depth of rock varying from 20 ft. to 50 ft. Lengths of cuts range from 2,000 ft. to 3,000 ft. The distribution of the 70 million cft. of rock cutting, from the point of view of lift is roughly as under:-

Quantity	Lift involved from bed level to ground level.
20 M.cft.	upto 10 ft.
20 "	10 to 20 ft.
20 "	20 to 30 ft.
10 "	30 to 50 ft.

The rock is Deccan Trap known by geologists as "Basalt."

3. Though canals with these dimensions were excavated in the past (.e.g. Nira Right Bank Canal), the work was done by mining bars and black-powder blasting and progress was, therefore, very slow. In the present case, Government wish to construct the work in a period of 3 years and it is, therefore, essential to use machinery.

4. As you sell rock-drilling machinery and have been in touch with this office in connection with various types of equipment, you have a full idea of our requirements. In fact your representatives have visited the site of the work and know the situation.

5. As few have definite data regarding performance of different sizes and types of pneumatic drills and mucking machines, in open cuts, I consider that the firms like you alone are in a position to recommend the type, size and number required.

6. I, therefore, request you to kindly supply me a statement of the machines which, in your opinion, will be required for the above. This should cover everything from the compressor to the very last accessory essential. To allow you to judge, I attach a list of the various type of plant needed. The list is not meant to restrict you from including any additional plant you consider necessary nor to insist upon you including in your list, items you may consider unnecessary. You might base your calculations on 2 Shifts per day and on the normal type of Jibber machine available.

7. ...

7. Though the total quantity of rock is given above, the equipment should be for say 5 units, each unit being self sufficient for drilling with say 14 M.cft. of rock; each such unit will be working in a length of 10 to 15 miles. It is, however, open for you to change the number of units. The number of units may, if you so think fit, be anything from 3 to 7. There is also no objection to have some equipment common to 2 or more units e.g. sharpener-sets on your recommendation.

8. I also want you to quote prices for each of the machine and the total estimate of all machinery you consider necessary. In case you do not sell all the machines, you may submit lists and estimates in 2 batches, one for such out of the total machinery that you sell and another for such machinery ~~which~~ as you consider necessary but which is sold by others. In the case of the latter, you are requested to state the name of the firm selling the equipment and approximate price for each. The quotations for the latter will not then be taken to be binding on you for the prices but I still expect you will quote approximate prices.

9. Along with the estimates and statements, I would also like you to supply information as under :-

(i) Whether you are in a position to supply any of the machines immediately e.g. if you have some on hand.

If so, state, name, type and size.

(ii) If so, whether you would be prepared to wait for about 3 months before the machines are paid for. In the ~~meantime~~ meanwhile, the machines will be taken over and be in use.

(iii) Please state whether you are prepared to give guarantee about the life and performance of the machine, e.g.

_____ hours of actual work in life.

_____ Cft. of material handled.

_____ Rft. of holes in Deccan Trap.

(iv) Information as at (iii) is required even in case you expect to supply only after a certain period after a firm order is placed.

(v) We would highly appreciate firms which would be satisfied with the following conditions of payment :-

(a) 50% payment on arrival of machines at Bombay and the same being handed over to us at Bombay.

(b) 20% payment on machines being erected at site by you and each put in working order.

We, on our part, will guarantee transport within one month of clearance from docks.

(c) 30% in 3 instalments -

(1) one 6 months after demonstration at site,
(2) second 1 year -do-
and (3) 1,1/2 years. -do-

on condition of satisfactory working.

(vi) In case you want to quote extra for accepting conditions as above, you are requested to do so.

(vii) Please state what service you are prepared to give to train staff in using the machinery and the - period for which this will be given.

(viii) Please state guarantee of spare parts and -- steels and bits etc.

10. In case you are not agreeable to 5 or 6 or to any out of the rest, please state accordingly.

11. Any additional information as available and which you think will be helpful should be stated.

12. I expect a reply within 15 days as you are already in possession of all details and in correspondence with this office for a long time.

13. In your case, you had already offered some equipment but this letter is for a request for quotations which - hold good to-day. Please, therefore, do not refer to old correspondence but repeat details.

Yours faithfully,

Sd/- N. S. Joshi.

RGY/16.2
Compd.by.

D.A.1 list

Superintending Engineer,
Karnatak Irrigation Circle.

S.No.	Particulars.	No. reqd.	Cost each	Total cost	Remarks
1.	~~Portable~~ Air compressors. State capacity etc.				
2.	Rock drills - State sizes.				
3.	Heavy duty lengths of hose with rock drill.				
4.	Automatic lubricators.				
5.	Demolition tools of different types to suit the above (cost of each type to be given separately).				
6.	Hollow drills steel - sizes				
7.	Suitable peg points.				
8.	2' rods.) 4' rods.)of sizes. Other rods.)				
9.	Assorted bits - sizes.				
* ~~9A~~	Specialized bits(if any), e.g. carbide.				
9B	Steel Rod for Drilling.				
10.	Sharpener with punching and accessories for putting on bits and shanks on rods needed for items recommended by you.				
10-A	Grinder.				
11.	Forges oil fired with oil tanks.				
	<u>Blacksmith shop equipment.</u>				
12.	Hot Miller - Pneumatic driven with rear attachment.				
13.	Shank grinder pneumatic driven				
14.	Bit quench tank.				
15.	Rod grinder tool.				
16.	Power hacksaw with motor.				
17.	Water circulating pump, electric driven with motor.				
18.	Oil quench tank.				
~~12.~~	<u>Accessories.</u>				
19.	Sump pumps				
20.	Complete sets of spares				

* you may recommend any of the three or all three or any two as you think fit. In the latter cases, state requirements & proportion of each separately for 9, 9A & 9B

S.No.	Particulars	No. reqd.	Cost each	Total cost.	Remarks
21.	Complete sets of spares for engines and compressors for 3 years normal working.(give details)				
22.	Complete sets of spares for demolition tools and rock drills for normal working of 2 years (give details).				
23.	Cement gun with all accessories.				
24.	Double barrel water tank.				
25.	Scraper or Atlas Hyster loaders for excavation and mucking excavated material operated pneumatically.				
26.	Sets of 3" piping.				
	Sets of 2" piping				
	Other piping, if considered necessary by you.				

RGY/16.2
compd.by:

No.G-111

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 19th February 1949.

To

The Secretary to Government,
Public Works Department, Bombay.

Subject:- Machinery for Ghataprabha Left Bank Canal:
Rock-cutting machinery. p.87

Reference:- This office No.G-111 dated the 23rd December 1948.

2. I find that no reply is received to the above - though it is now nearing 2 months since.

I write this to record that Government have since sanctioned the plans and estimates for Ghataprabha Left - Bank Canal, vide G.R., P.W.D., No.9194/36 dated the 13th January 1949, and it is essential to have quick decisions on such matters.

3. In the meantime, I find that quite a large number of articles available with the various firms, and on which I had made proposals in the statement in para 4 of my -- letter, have been sold out, with the result that that - proposal is out of date.

4. As this difficulty is sure to repeat itself in every such proposal, I find myself in an unenviable position as to how to proceed. If no decision could be taken for two months, on purchase (or otherwise) of plant said to be available as reported by me, I think the procedure and - ordering of procurement of machinery should change. I, therefore, suggest that instead of my making the proposals, the matter may be dealt with by the Secretariat itself, so that no time will be lost in purchasing articles which are known to be available with firms in Bombay and to ensure that we are not in an anomalous situation of placing an order after the articles are sold out.

5. To help Government to take action, I have sent a letter to some established firms and copy of it is -- attached.

I will forward their replies to Government for further disposal.

6. I met the representative of the Consolidated - Pneumatic Tool Co.Ltd. recently and he seemed agreeable to supply rock-cutting machinery immediately and would not insist on payment till after three months, on the clear understanding that the ~~latter~~ conditions are not offered to other firms.

I consider this to be a very fair offer and it is for Government to decide whether to consider the offer or otherwise.

I attach herewith a copy of the letter from - Consolidated Pneumatic Tool Co.Ltd. in this respect.

D.A (2 letters)
(1) copy of T.O. on G.111 dtd 18-2-49.
(2) ~~D.A.~~ Copy of letter No.VN/LXF/9 dt. 8-2-49.

Superintending Engineer,
Karnatak Irrigation Circle.

Con. Br.
23/2

P. W. D.
File No. 6572/36(2)
Serial No. 12916

Con Br
21 1169

Letter No. SP.1613/28/1959

Office of the Director of Industries
Old Custom House Yard, Fort,
Bombay, 18th Feb.1949.

To

The Superintending Engineer,
Karnatak Irrigation Circle,
Bombay.

Subject: Machinery for Rock Core - drilling "Failings Calyx etc."

b.97

Reference: Your letter No.G-III dated the 5th February 1949.

2. In this connection I have to invite your attention to this office letter No.SP.1613/28/113 dated the 7th January 1949 addressed to the Superintending Engineer, Special Investigation Circle, Dharwar. It is presumed that Superintending Engineer, Special Investigation Circle and Superintending Engineer, Karnatak Irrigation Circle happen to be the designation of one and the same officer. A copy of the said letter is attached herewith for ready reference. Immediately on receipt of sanction of Government in Public Works Department orders as stated in the above letter will be placed. Messrs. Volkart Bros were addressed on the 8th January 1949 as desired by you in your letter No.G-111 dated 24th December 1948 to quote for "JOYS" Sullivan Diamond Drills but there being no reply from them till today a reminder is being sent to them.

I may, however, request you to expedite the Government in Public Works Department to issue early orders to enable this office to place the necessary firm orders with the supplying firms.

Sd / -----

Assistant Stores Purchasing Officer,
for Director of Industries & Stores Purchasing Officer, Bombay.

BR/23-2.
Compd.by:

No. G-111 Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, Feb.1949.

To

The Director of Industries
& Stores Purchasing Officer,
Bombay.

Subject: Machinery for Rock-Core Drilling -
Failings, Calyx, Etc.
---

p 123

Reference: Your letter No.SP-1613/28/1959 dated the 18th February 1949.

2. As presumed by you, the name of this Circle has since been changed from "Special Investigation Circle" to "Karnatak Irrigation Circle". I presumed you are supplied this information by Government. For your information I send herewith copy of Government Resolution (P.W.D.) No.N8974/36 dated the 29th November 1948.

3. Letter No.SP-1613/28/113 dated the 7th January 1949 referred to by you relates to Pneumatic Rock-Cutting machinery and has been dealt with separately vide this office No.G-111 dated 19-2-1949 addressed to the Secretary to Government, Public Works Department and copy sent to you. It need not be mixed up with "Core-Drilling" machinery referred to in this office No.G-111 dated the 5th February 1949.

p.121

p 97

4. Regarding Core-drilling machinery, I would request your attention to this office references -

(a) No.G-111 dated 11-12-1948, para 7;
and (b) No.G-111 dated 15/24-12-1948, last sentence

extracts reproduced below for ready reference:-

Para 7 (1) & (2) of No.G-111 dated 11-12-1948: p 57

" 1) I want the company to guarantee footage per hour; and
2) I want them to give me an actual demonstration for one or two bores, 100 ft. deep and for which we are willing to pay. This alone will allow the speed to be tested and verified. "

Last sentence of reference No.G-111 of 15/24-12-1948:

" * * * Please call for quotations for this also. As intimated in my former letter, please insist upon an actual demonstration for one or two bores. We are willing to pay for this service at reasonable rates. "

I should like to know whether this was conveyed to all Firms and whether the quotations received by you fulfil these conditions and whether the Firms have agreed to demonstrate the performance of the machines offered

by.....

by them before placing an order. Information on this point should have been and should now please be furnished without to this office without delay.

No decision can be taken either by this office nor by Government without definite information on this an important requirement.

5. In this connection, your attention is also invited to this office No.G-111 dated the 18th February 1949 - addressed to Messrs. Consolidated Pneumatic Tool Co.Ltd. and copy sent to you.

Yours faithfully,

Superintending Engineer,.
Karnatak Irrigation Circle.

Encl:-
A copy of G.R. No.N/8974/36 dt.29.11.48.

Copy forwarded with compliments to the Secretary to Government, Public Works Department, Bombay, with copy of the letter No.SP-1613/28/1959, dated the 18th February 1949 from the Director of Industries and Stores purchasing Officer, Bombay.

BR/23-2.
Compd.by:

P. W. D.
File No. 6572/36(2)
Serial No. 14311

P.W.D.

Cn. Br.

p.48 - p.50

Submitted together with S. Nos. 65039, 69443 etc.

2. These papers mainly deal with the question of purchasing "Core-Drilling" machinery & "Rock-Cutting" Machinery for the Ghataprabha Left Bank Canal Project. The "Core-Drilling" Machinery is limited to Failings "1500" Hole Master Core Drill and Failings "750" Diamond Core Drill. "Rock-Cutting" Machinery, which the S.E., K.I.C., wishes to purchase is as under:-

(a) Air compressors (6 Nos)
(b) Sinker Drills (12 Nos)
(c) Drill Sharpeners (1 Nos)
(d) Steel rods hexagonal (6 tons)

3. Core-Drilling Machinery. The S.E., K.I.C., is interested in Failings "1500" Hole Master Core Drill and Failings "750" Diamond Core Drill. The cost of these machines is about Rs. 1,88,000 and Rs. 90,000 respectively. The S.E. prefers Failing "1500" type as this Core Drill has more speed in footage of rock drilling per day. The above prices are offered by Messrs. Larsen & Toubro, Ltd., which is a firm of repute. It is however not clear whether the S.E. had called for quotations for these Machines from other firms as well.

@ ff see pp. 65 + 77

§ ff see paras. 2 at p 53

4. The S.E. Rly. is keen in having a demonstration by these machines before placing a firm order on the firm for the same. In this con. attention is invited to his letter No. G. 111, dt. the 29th Jany. 1949, addressed to the Ch. Engr., Jaipur State, where it seems such a machine is being used. He is prepared to go to Jaipur if need be. Further developments in the matter are not known. Attention in this con. is also invited to portion marked "A" of Messrs. Larsen & Toubro's letter at p. 99 ante addressed to the S.E. from which it will be seen that drilling operations are to be carried out at Damodar Valley Corporation Site. It is, however, not known whether the S.E. wishes to go there for seeing them.

5. From above it will be noticed that; unless the S.E. is satisfied about the working of these Core Drills by means of demonstration, he is not prepared to go for them. It will be therefore not desirable to place an order for them by Govt. thro' the Dir. of Industries & Stores Purchasing Officer. Another point of importance is whether the price of Rs. 1,88,000 and Rs. 90,000 quoted by Messrs. Larsen & Toubro is the lowest. If not quotations from other firms will also have to be called for before obtaining the sanction of Govt. for the purchase of these machines.

6. In the circumstances it is for consideration whether the S.E. K.I.C. may, in the first instance be requested to satisfy himself, by means of demonstration, the working of these machines. If need be may also perhaps be informed that Govt. will have no objection to allow him to visit any part of India for the purpose. The necy. draft will be put up on receip of orders.

— 7. —

6572/36(2)
14311

⊗ M see p. 85 — 7. Rock-Cutting Machinery. — The S.E. wishes to purchase⊗ the following machinery: —

Machinery	Firm from which it is to be purchased.
1 (a) Air Compressers 315 cft. capacity (2 Nos)	M/s. Consolidated Pneumatic Tools & Co.
(b) — Do — (Gardener Denver make) (4 Nos)	M/s. Larsen & Toubro.
2 (a) Sinker Drills (45 lbs) (4 Nos)	M/s. Consol. Pneumatic Tools & Co.
(b) — Do — (8 Nos)	M/s. Larsen & Toubro.
3. Drill sharpeners (1 No.)	— Do —
4. (a) Steel rods hexagonal (2 tons)	M/s. Consol. Pneumatic Tools & Co.
(b) — Do — (4 tons)	M/s. Larsen & Toubro.

The quotations as given by Firms p. 83 are as ~~as~~ under: —

Item.	M/s. Khanna	M/s. Ingersoll	M/s C.P. Tools & Co
(a) Compressers	29,964	30,675	31,200
(b) Sinker Drills (45 lbs)	1,210	1,095	1,015

— The —

The S.E. has not forwarded any quotations from Messrs. Larsen & Toubro from whom he wants to buy most of the things (as they say the quotations change from month to month) from above it will also be seen that, though M/S. Consolidated Pneumatic Tools Co. has quoted more than M/S. Khanna & Ingersoll, he has proposed to buy 2 compressors from M/S. Consolidated P. Tools & Co. No quotations have been forwarded in the case of drill sharpeners and steel rods. In the circumstances it is for consideration whether the Dir. of Industries & Stores purchasing Officer may be requested u.o. to call for quotations for Machinery mentioned at "A" overleaf in the first instance.

⊗ Pl. see "A" at p. 87

8. Serial No. 7600 p96. It is presumed that no specific action is to be taken on S.E., K.I.C's letter No. P. 95 G.III, dt. the 29th Jany. 1948.

Thro' D E (R)

11/3/49

11/3/49

It is seen that Con. Br. has delayed the disposal of number of references in this file. It shd go through all refns and see that all are disposed off without any further delay.

Dy Secy (R&S)

Secy (I)

⊗ Say, all refns are disposed of.

2 General permission cannot be given to S.E.K.I.C. for visiting any place in India for seeing the demonstration of the working of any plant. He may approach Govt with a specific request which may be considered on its own merits.

Jo u/s 13/3

A

3. Regarding the purchase of the Facilities Core Drills, S.E.K.I.C. shd be specifically asked whether he wants this order to be

placed or he wants 131 ~~to~~ 65-72/36/2 to wait till the results of demonstration are known.

4. Regarding the purchase of Compressors, we had some time back asked the D.I.&S.P.O. to invite quotations. These were received and sent to S.E.& K.I.C., D.I.C & S.G.C. to make their selection for their works. If any report from S.E.K.I.C. is received in the matter, it may be considered along with these quotations for the purpose of prices.

On any one job, it is desirable to have plant of the same type (e.g. Compressors) from one manufacturer so that storing of spares & interchangability of parts would facilitate the smooth working of the plant. However, on the ground of availability, if these machines are required to be purchased immediately, D.I.&S.P.O may be asked to place orders after U.O.R. to E.&I.D. & F.D. for all the plant mentioned at P-129.

12/3/49

Secy (I).

13.3.49

Con. For. P. W. D.

Resubmitted :- p. 130

2. Refees:- Paras. 2 + 3 of Dy. Secy (R+B)'s note, dd: 12-3-49. The draft put up may issue, if approved.

3. Refce:- Para. 4 ibid. No reports from S. Es. concerned have yet been recd. in con. with quotations for Air-Compressors. They are being expedited separately. (vide file No. 65-72/36(2)/12666). In this con. it may be stated that the S.E., K.D.C. is being permitted separately (in file No. 65-72/36(2)/12978) to place an order on Messrs. C. P. Tool Co. Thro the Dir. of Indust. & S.I. P. Officer on Messrs. ~~Consolidated Pneumatic Tool Co.~~ for an Air Compressor and four drills. A

4. In the circumstances, it is for consideration (a) whether reports from S. Es. in con. with quotations for Air-Compressors may be awaited or (b) whether he may be allowed to purchase machinery mentioned at p. 129 ante less one Air Compressor + four drills. If as at (b), the papers will be rejd. u.o. to the E. + D. D. + the F.D. before the D.G.I. + S.P.O. is requested to place an order.

RB 16/3/49.

The plant proposed to be purchased at 'A' is different from the plant shown on p-129. Approval of the E&D & F.D. may be obtained to purchase through the D.G.I. & S.P.O. all the plant as shown on p-129. In the meanwhile, telegrams should be sent to S.E.s to return the competitive quotations of the Air Compressors so that prices can be verified.

Dy. Secy (R+B) ✓

Secy (I)

Being done separately.

RB 17/3/49

VG 17/3/49

Secy (I)

Letter 133

6572/36(2)
14311.

No. 6572/36(2) - Gen.

P.W.D.,
B.C., 18th March 1949

To

The S.E., K.I.C

Subject: "Tailings ~~Model~~ New Modern Drills:

—o—

Refce:- Correspondence ending with your endt. No. G-111, dt. the 14-2-49. p101

2. From your correspondence on the subject it appears that you are not in favour of purchasing the machinery untill you are satisfied about the working of these machines by means of demonstration. You are, therefore, requested to report to Govt whether you wish to place an order for these machines at this just now or whether you want to wait till the results of demonstrations are known. In case you wish to purchase these machines now, pl. state the number & the model you prefer.

3. Your request for permission being given to you to visit any place in India for seeing the demonstration of the working of any plant cannot, if it is regretted, be granted. You may, if so desired, approach Govt with a specific request which will be considered on its own merit.

By order etc.

ISSUED
18/3/49

D.A. nil

16/3/49

Dy Secy (R&B)
Secy (W)

17/3/49

17.3.49

Asstt. Engr.
18/3/49

Letter No.E/PSR dated the 4th January 1949, from Messrs. Ingersoll Rand (India) Ltd., Denabank Building, 17-B, Elphinstone Circle, Bombay, to the Superintending Engineer, K.I.C., Dharwar.

Subject:- Calyx Drilling Machine.

" Your letter G-111 dt. 10-11-48.

We refer you to the above and in continuation of our letter of 17th Nov. we are pleased to state that we have since received prices and recommendations for a suitable Class H-3 Calyx drill to meet your requirements of drilling upto 150' and as per particulars detailed in the questionnaire supplied to us under your above referred letter.

Our suppliers are quoting for the H-3 drill with Gasoline engine drive for shipment in 3/4 months and with diesel engine drive for shipment in 4/5 months. We are quoting prices on both these and we leave the selection to you.

Our offers include standard set of 3.1/2" core tools, 150' of class 'F' rods and reasonable amount of 4" drive pipe in various lengths together with two 25-ton Jacks, spiders, and slips for withdrawing the drive pipe after completion of the hole. Necessary Calyxiter, set of common tools and accessories, and 27-ft leg Derrick are also offered with the equipment.

Prices are quoted you in US Dollars FOB Factory with freight allowed to New York and including export boxing, and we suggest th t purchase of this equipment be arranged thru DGIS, American Purchase Section, on ISM as by this means you will be able to get the material at the earliest possible time. If any assistance is needed in this connection we shall be pleased to supply same. You will have to ask for Dollar allocation and when granted you will have to then place the indent on standard Form 'SB.67 which procedure we believe you are fully familiar with.

We trust our offers are in line with your requirements, and if further questions arise please do not hesitate to advise."

RGY/14.3
compd. by.

137

ESTIMATE FORM

Ingersoll-Rand (India) Limited
Devkaran Nanjee Building
17-B, Elphinstone Circle
Bombay
P.O.Box 468

No.E/PSR
Date Jan.4 - 1948

The Superintending Engineer,
Special Investigation Circle,
Dharwar.

We quote below :-

ONE INGERSOLL RAND Class H-3 Calyx Core Drill complete with rack pressure feed type drill head, roller chain driven thru a friction clutch from the countershaft. The unit is equipped with an Ingersoll-Rand Hoist which is chain driven from the countershaft. The countershaft is fitted with a winch head and is driven thru roller chain from a 10 HP, 4-cylinder, 4-cycle Industrial type Gasoline or Diesel Engine equipped with clutch. The complete unit is mounted on a rigid structural steel frame and fitted with necessary piping for Calyxite and grout feet.

1 - Medium pressure, single-cylinder, double-acting, gasoline engine driven force pump, having a displacement of 35 GPM. The unit is mounted on a steel channel frame and is complete with foot valve and strainer.

STANDARD EQUIPMENT

1 - Class A ball bearing type water swivel
1 - 1/2" Calyx feed hose 10' long with coupling
1 - 1" Wash hose 6' long with couplings
6 - 2' drill rods with couplings F
2 - 5' drill rods with couplings F
1 - Male fishing tap
1 - Female fishing tap
1 - Supporting fork
2 - Hoisting Swivels
1 - Safety hook
1 - 10" steel pulley block for derrick
1 - 3/8" wire rope 75' long with clamps
1 - 1" manila rope 100' long.
1 - 27' leg derrick
1 - set size 3.1/2" tools with matching couplings consisting of the following :-

Core barrel short (2' long)
Core barrel long (10' long)
Core barrel plug
Calyx barrel (8' long)
Starting bit
Calyx bit (4 included per set)
Set of casing clamps
Chopping bit.

2 - Davis Cutters
15 - "F" rods 10' long
1 - set of common tools & accessories
1000 - Lbs Calyxite 10 x 12
40 - 5' length 4" drive pipe
5 - 3' " " " "
5 - 1' " " " "
4 - Drive shoe for 4" pipe
4 - Drive head for 4" "
1 - Drive weight 352-lbs.
2 - 25 ton Norton Jacks type 29A
1 - Spiders with slips for 4.1/2" O.D. pipe.

Price each drill complete as above with engine & equipment as listed .. FOB Factory with freight allowed to New York & including export boxing. ... US $ 10225.00

Alternatively:

Price each drill complete as above with diesel engine & equipment as listed above ... FOB etc. US $ 11225.00

PRICES: FOB Factory in US Dollars with freight allowed to New York and including export boxing.

Dollar prices quoted above are subject to same price changes as made effective by suppliers prior to date of shipment - prices, however, not to exceed 10%.

SALES TAX: Any sales tax which may be applicable will be added to our invoice charges.

DELIVERY: Drill with gasoline engine shipping time estimated 3/4 months ex works, from date of receipt of licence.

Drillx with Diesel engine shipping time estimated 4/5 months ex works from the date of receipt of licence.

The delivery periods given cannot be guaranteed & orders once placed cannot be cancelled not even for reasons of delay in delivery time.

TERMS: Suggest orders ~~xx~~ be placed thru DGIS, American Purchase Section, on ISM.

NB: To get the c.i.f. value add approximately 7.1/2 to 10% to the above FOB values.

To get the F.O.R. value add approximately 15% to the above FOB values.

for INGERSOLL-RAND (INDIA) LTD.

Sd/-

RGY/14.3
compd.by.

Letter No.VN/LXF/10 dated the 8th February 1949, from Messrs.Consolidated Pneumatic Tool Co.Ltd.,Hamilton House, Ballard Estate, Bombay, to the Superintending Engineer, K.I.C., Dharwar.

Subject:- Ghataprabha Canals.
Diamond Drills.

"With reference to the visit of our representative and his discussion with you, we have pleasure in attaching Bulletin No.318 illustrating and describing the Diamond Core and Blast Hole Drill.

You will readily see from the description that this Drill will be most handy for obtaining cores on the dam site as it could be easily carried by two or three men from place to place and put into operation permitting the Air Compressor delivering air to the Drill being located at any convenient spot any reasonable distance away from the Drill. You will also appreciate that this machine could be shifted from site to site like a Drifter and the setting up will take up hardly one or two hours.

Another great advantage of our Diamond Drill is its adaptability for drilling horizontal or angle holes which will be required at a later date in dam construction for grouting.

We understand that you require 1.5/8" core and we are agreeable to import one of these machines after receipt of the necessary licence and have it demonstrated at your site, the Air compressor to be supplied by you for operating this Drill.

We offer this demonstration for a period of one month free of any cost, but you should agree to bear the expenses connected with the running of the Air Compressor and give us necessary facilities for maintaining the operators at site. You will further agree to pay for the material used in carrying out this demonstration, namely, the Diamond bits, or alternatively agree to pay for the footage drilled at a flat rate of Rs.35/- per foot.

If the machine is found suitable it will be retained by you and we will charge you for its standard price.

This is only a rough basis of the agreement on which we are prepared to import the machine and have it tried at site which, if found unsuitable, will be taken away by us.

Assuring you of our best attention and awaiting your further instructions, we are."

143

No. G-111/1. Office of the Superintending Engineer,
Karnatak Irrigation Circle,
via Dharwar, 15th Mar.1949.

To

The Secretary to the
Government of Bombay,
Public Works Department,
Bombay.

Subject: Machinery for Drilling rock for excavating depth of foundations etc.

Reference: T.O. No.G-111 of 19-11-1948; p.43
" " G-111 of 18-2-1949;
" " G-111/1 of 24-2-1949 to the p.125
Dir.of Industries, Bombay.

2. I had suggested at the P.W.D.Officers' meeting under the Chairmanship of Hon.the Minister for Public Works & Public Health, that it was essential to purchase some core-Drilling machine with a high speed, in order to decide upon sites of foundations for Dams. Soon after, I wrote in November suggesting the purchase of a 750-Failings Drill. Few in India have experience of this machine and I, therefore, arranged to take Mr. Larsen (younger) of Messrs.Larsen & Toubro Co. to the sites of Dams and supplied all relevant information to Government (vide this office No.G-111 of 14-2-1949).

3. I have been awaiting some communication from Government for the past three months but have heard nothing. Soon after my letter, the Director of Industries also called for quotations from other firms leaving them freedom to quote for other type of core-Drills (including Diamond Drills). I had particularly specified that I wanted to know the footage rate of drilling per day, and wanted a prior demonstration in support.

4. I find it difficult to understand where the difficulty lies in arriving at a decision. In fact, the present procedure almost looks like a riddle or a triple confusion (between Superintending Engineer, Government and Director of Industries, each probably thinking that one of the two others than himself is doing the needful!) The Director of Industries says he has not received orders from Government as to which of the Drills was to be ordered. He was requested by this office to say whether he intimated to each Firm the insistance on quoting rate of footage and demonstration. Obviously, He may not have done this, and may as such, not be sending a reply to queries made by ~~them~~ this office. As explained by me long back under this office No. G-111/II dated 23-12-48 (para 5, p.87); I have,failed to understand the part, the Director of Industries & Stores Purchasing Officer is expected to play in such purchases. He has not given (and does not appear to be giving) any technical advice and does not take any step other than placing an order. I would like to know the distribution of responsibility.

5. The present may be quoted as a typical instance where a period of three months has gone in a matter reported upon as extremely urgent and where no progress is seen.

6. ....

6. If time is thus lost, the progress on investigations can only be imagined !! I have at least three important sites for Dams to investigate into and another three probable. The cost of each is estimated for works only at 2 to 4 ~~crores~~ crores, with an all-in cost of 6 to 13 crores: The very basic purchase of the machinery for taking bores to determine the sites of these important dam has made no progress for over three months in spite of all efforts on the part of this office.

7. Not having heard anything from Government or not having received any directive or even suggestions or remarks, I have no alternative left but to pursue the correspondence by imagining what may have delayed Government decision.

8. I imagine that probably the high cost of the 750-Failings and the high pay required by the staff to run the same (Rs.900 upwards per month) is the reason for Government's indecision regarding its purchase.

Leaving off the costly "Failings" for these reasons, I have received details of an offer only from 2 firms viz.- Messrs. Ingersoll Rand and Consolidated Pneumatic Tools Co. Copy of offers by both ~~x~~ companies accompany.

9. The offer by Ingersoll-Rand is very one-sided. They undertake no responsibility of prior demonstration and we have to risk purchasing a plant which may be unsuited (wholly or partly). The offer by Messrs. Consolidated Pneumatic Tool Co is however very attractive (vide copy of their letter No.VN/LXF/10 dated 8-2-1949 forwarded under this office No.G-111 of 18-2-1949). They offer importing a machine and giving a demonstration by only charging us a footage rate for actual bores taken. There is no binding on our part to purchase the machine, and we are at liberty to purchase it, if we are satisfied with the performance.

@ Permission has since been given to SE & SP under G.L. No. 6572/36(2) dt. 19-3-49.

10. Actually they have not quoted cost, but say they will let us know shortly. All they need at this stage is an import licence and I request Government to help them to get the same with the least possible delay. The want of quotations need not delay this.

11. I am informing the Consolidated Pneumatic Tools Company, clarifying that the satisfactory performance will include -

(a) Speed;
(b) Cost of machine as compared with offers by others on similar conditions particularly with prior demonstration;
& (c) Supply and cost of accessories.

They have been honest enough to say that they could not quote the daily footage but that can be tested in the demonstration and we are at liberty to place order and purchase only if we find the demonstration satisfactory.

P. W. D.
6572/36(2)
Serial No. 1847

D.A.:- Two letters as in para 8 above

Superintending Engineer,
Karnatak Irrigation Circle.

BR/9-3.
Compd.by:

Copy forwarded with compliments to the Director of Industries & Stores Purchasing Officer, Bombay.

6572/36 (2)
18474

Cn. Bo.

P.W.D.

It is presumed that no action is necy. on the S.E.'s K. I. Co's letter at pp. 143-44 ante for the present, in view of the G.L. at pp. 133 ante. The receipt of a communication from the S.E. may be awaited with refce. to the G.E. quoted above

2. In view of the Dy. Secy (R&B)'s note at p. 132 ante, these papers may be retd. to the E. & D.O. & the F.D. with a request to agree to this Dept's proposal to purchase the following machinery for Ghataprabha Left Bank Canal Project: -

A | Thro' the Dir. of Sup. & S.P.O

Machinery	Firm from which it is to be purchased.
1 (a) Air Compressors 315 C.f.t. capacity (2 Nos).	M/S. Consolidated Pneumatic Tools & Co.
(b) — Do — Gardener Denver make (4 Nos)	M/S. Larsen & Toubro.
2 (a) Sinker Drills (45 lbs) (4 Nos)	M/S. Cons. P. T. & Co.
(b) — Do — (8 Nos)	M/S. Larsen & Toubro
3. Drill Sharpeners (1 No.)	— Do —
4. (a) Steel rods hexagonal (2 tons)	M/S. C. P. T. & Co.
(b) — Do — (4 tons)	M/S. Larsen & Toubro.

3. The cost of Air-Compressors is about Rs. 30,000 & that of sinker drills about Rs. 1,100 each. The total cost of 6 Air-Compressors & 12 drills is therefore about Rs. 1,93,200. In addition to this there will be some cost on account of drill sharpeners and hexagonal steel rods. The total cost may for the machinery mentioned overleaf may be taken as Rs. 2 lakhs, which will be met from the provision of Rs. 39,50,000 made for Ghataprabha Left Bank Canal Project under the head "68 - P.W.D. & D.P." in the budget for the year 1969-70.

Shown as (III)

28/3/69

28/3/69

S.E.'s reply to govt letter at P-133 regarding "Failings drill" may be awaited.

Dy Secy (M&B)

Regarding his criticism of the existing procedure of purchasing through the D.G.S.&D., it may be said that govt has finally decided that orders shd be placed through the D.G.&S.D. S.E. shd forward all quotations with his recommendations to D.G.&S.D. through govt for placing orders. S.E.D.G.C. is following that procedure and he is getting his machinery all right. Difficulty experienced in the case of S.E.K.G.C. is due to (i) Proposals not being very clear (ii) there being proposals & counter proposals which confuse the case Rs. & (iii) Demonstration being insisted before purchase & (iv) mixing of the issues. If the delay will be cut down if clear proposals are made to enable govt to understand exactly what he wants.

Dy Secy (I)

S.E.'s proposal in para-9 on P-144 are agreed & orders have already issued on another file.

papers may be shown to E&I.D. & F.D.
connection with the purchase of machinery
mentioned in the office note.

29/3/49

Scy (I)

29.3.49

Very Urgent

U.O. to E.I.D. dt. 30th March 1949.
F.D.

Issued U.O.
29/3/49

EDUCATION
File No. Pol. (S) 72/36(2)/1845
30/3/49
Serial No. 21
856
30/3

Seen & passed on U.O. of even no.

Ref ff. 145-146.
& 'A' of p. 45

1.4.49
2.4.49

FINANCE DEPARTMENT
File No. 6
Date
Serial No.

U.O. of even no. dt. 4/4/49

Finance Deptt.
Sec I

The proposal is to purchase
the machinery mentioned on page
145 ante of the Dir. of Ind. & S.P.O
No. is required in connection with
the Shahabad Pradhan Tehsil Bank
and Project No. is proposed

to purchase it from the firms mentioned in Column 2 on page 1 ~~less~~. Please see portion ~~below~~ 'B' on page 1 of which summarises the quotations of the firms for Air-Compressors and Sinker Drills. It is not clear why lowest quotations are not taken into account & the order placed with the lowest tenderer. Besides two quotations have been given in respect of Drill Sharpeners and Steel Rods hexagonal &c. In the absence of the quotations it is not possible to say whether the ~~lowest and~~ lowest in respect of these latter articles. In the circumstances the E.D may suggest that the machinery may be purchased through the D.G.S & S.P.O and the latter office may invite quotations and place the order with the lowest tenderer.

N.S.
9/4/49

9/4

con 13/4

DS (CSR)

6572/36(2)

24/4/49

Sec (Mr. Patel) 9/11/49.

No.G-111

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 11th April 1949.

To

The Secretary to Government,
Public Works Department, Bombay.

Subject:- "Failings" Core drilling machine. P.133

Reference : Government letter No.6572/36(2)-Con., dated the 18th March 1949.

2. I do consider it highly desirable to have a demonstration of the "Failings" Core drilling machine before placing an order. It may be far too unwieldy to be taken to work site. Only a demonstration can show whether the claim of 5' per hour of bore in hard rock is correct.

3. I have ascertained that one "Failings" Core drilling machine is at present working in and round about Jaipur and that Messrs.Larsen & Toubro have supplied some for the Hirakud Project. I am already negotiating with the Chief Engineer, Electrical & Mechanical Department of the Jaipur State with a view to arrange for demonstration of the machine. I have not so far been able to get necessary information from him particularly regarding the material through which the drilling is done viz. rock and if so, what type. I understand from Messrs.Larsen & Toubro that two of their 750 Failings and one 1500 Failings are actually working on the Damodar Valley Project (HAZIRABAD in Bihar). I, therefore, request favour of Government approval to my visit to the said Project. Probably a visit to Jaipur on way would be best.

150

4. Regarding reference to visit any place in India, I presume Government were referring to para 5 of this office No.G-111 dated the 12th December 1948. Obviously, I meant to actually name the place to be visited and ask for Government's approval to the same after ascertaining actual place from Messrs.Larsen & Toubro.

Superintending Engineer,
Karnatak Irrigation Circle.

D.A.Nil

RGY/10.4
compd.by.

P. W. D.
File No. 6572/36(2)
Serial No. 25324

65-72/36(2)
25-324

Con. Br.

P. W. D.

*Submitted together with S. No. 24865. ₱ 148

2. Serial No. 24865. ₱. 148 The F.D. suggests ₱. 148 that the machinery mentioned at ₱. 145 ante may be purchased thro' the Dir. of I. & S. P. O. Kasli but that officer should invite quotations and place the order with the lowest tenderer. In this con. it may be stated that quotations for Air Compressors have already been invited by the Dir. of I. & S. P. O. and the same were circulated to our local officers for information, vide O.M. dt. the 5-4-49 in file No. 65-72/36(2)/21901. Going thro' these quotations # it will be found that the approx. prices quoted by some of the reputed firms are as under:-

(R) Slip A
₱. 111
Slip B

	Larsen + Toubro	Worthington-Simpson Ltd.	Garlick + Co.	Climax Rock Drill + Engg. Works.	Const. Equip. Co.	Khanna	Consolidated Pneumatic Co.
105 Cuft. Compressor	15,100	12,000	14,000	13,800	16,000	14,900	14,700
210 Cuft. Compressor	25,200	20,000	22,000	21,700	26,900	23,300	25,500
315 Cuft. Compressor	31,000	26,000	34,500	34,400	29,600	28,700	31,200.

The S.E., R. S.C., has proposed to buy Air-Compressors (315 Cuft) from Messrs Larsen & Toubro & Consolidated Pneumatic Co. & Co., who have quoted prices of Rs. 31,000 (approx), which, though not the lowest compare very favourably with prices quoted by other firms. The criterion to buy machinery does not, however depend only on the price. Other factors

h-

such as quality of machinery, the reliableness of firms, etc., must also be taken into consideration In the circumstances, the F.D. may perhaps be again requested to agree to this Deptt. proposal to buy machinery mentioned at p. 145 ante from M/s. Consolidated Pneumatic Tools & Co. and M/S. Larsen and Toubro Co.

3. Serial No. 25-324. p.150 Submitted with refee. to G.R. No. 65-42/36(2) - Con. p.133 dt: the 18th March 1949. In this G.R. the S.E. K.I.C. was asked to report whether he wished to place an order for Tailings Core Drilling Machines just now or whether he wanted to wait till the results of demonstrations were known. He was also requested to report the number and the model of the machines he wished to order. He states that he does not consider it highly desirable to have a demonstration by these machines but at the same time requests Govt. permission to visit the Damodar Valley Project where such machines are working. He, however, does not say anything whether Govt. should place an order for these machines just now or whether we should wait for the outcome of his proposed visit to the Damodar Valley Project. It is presumed that unless the S.E. K.I.C. makes a definite proposal about the purchase of Tailings' Machines, no further action is to be taken in the matter.

The point re. giving permission to the S.E. K.I.C., for visiting the Damodar Valley Project is for orders

21/4/49. We may agree to the course suggested by F.D. As far as "Air Compressors" are concerned, quotations have already been invited by the D.G.S.&D. and order can be placed for the lowest price. For other items, quotations may be invited by that office.

Dy. Secy (R&B)

Secy (I)

153

S.E. K.D.C. is to be relieved by the end of this month and Gast. wd derive no advantage by permitting him to go to Jaipur and Damodar Valley Project for seeing the working of the Tailings Dill. S.E. may be informed that this request cannot be granted.

24/4/49

Secy (D)

24.4.49

No. G-111

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Via Dharwar, 14th May 1949.

To

The Secretary to Government,
Public Works Department,
Bombay.

Subject: Railings - Core Drilling Machine. ₱.149

Reference: This office No.G-111 dated the 11th Apr.1949.

2. Messrs. Larsen & Toubro Ltd. have since informed me that a Railings Core Drilling Machine "1500 - Drill " is working at Kotah, which is situated on the Bombay-Baroda-Mathura-Delhi line of the B.B.C.I Railway. Similarly, as already reported, one Railings -750 Drilling Machine is working at Jaipur.

3. As it is considered highly desirable to have a demonstration of these machines to judge their suitability for our works, I request the favour of Government approval for my visit to Jaipur and Kotah. A report of my inspection of these machines will be sent to Government in due course.

13/5

Superintending Engineer,
Karnatak Irrigation Circle.

BR/13-5.
Compd.by:

Con. 1715

1613

P. W. D.
File No. 6572/36(2)
Serial No. 32847

157

6572/36(2)
32847

Cen. Bo.

P.W.D.

Submitted with refee. to the Dy. Secy (R&B)'s note at pp 152-53 ante.

2. The draft put up may issue, if approved.

3. Serial No. 32847. (p.156) In the circumstances explained, it is for consideration whether permission may be given to Mr. A. G. Naik, the present S.E., K.I.C., to visit Jaipur & Kotah for judging the suitability of their machines. As Mr. N. S. Joshi has since retired from Govt. service, no action is now, it is presumed, necy. with refee. to "A" of Dy. Secy (R&B)'s note at p. 153 ante.

Hers' AB (11)

*p 155

25/5/69 in Secrt 24/5/69

24/5/69 Mr. Naik may be allowed to visit Jaipur & Kotah.

BM 25/5/69

Dy. Secy (R&B)

It is time for S.E. to come to decision

Secy. (P)

28/5/69

Letter. 158.

No. 65-72/36(2)-Con. P. W. D.;
P.C., 25th May 1949.

To
The S.E. K:9.C.

Subject:- Machinery for the construction of the Ghataprabha Left-Bank Canal.

p. 87

Refce:- Correspondence ending with your letter No. G.-111/1, dt. the 23rd Dec. 1948.

2. Sanction is accorded to the purchase of 6 Nos. of Air Compressors (315 Cft) thro' the Dir. of Indust. & Stores Purchasing Officer, B'bay from the lowest tenderer. In this con. your attention is invited to quotations circulated under G. E. No. 6572/36(2)-Con of even date. Sinker drills, along with your orders for hire reference

⊗ Dft No. 65-72/36(2)/21901 — Submitted as a linked case. Sh/p II

Quotations should be sent to the D.I & S.P.O.

3. Regarding drill sharpener and steel rods hexagonal, I am to state that the Dir. of I. & S.P. Officer. may be requested, ~~in the first instance~~, to invite fresh quotations and then you may approach Govt in the matter. ~~the~~ to that effice. ~~make order. Necessary Authority & sanctions~~ may be furnished

4. The cost of the machinery is debitable to provision made under the head "68-P.W.R & D.P" for the Ghataprabha Left Bank Canal Project.

D.A: Nil.

By order etc.

Orders issued in consultation with Finance Department and can be seen when required.

Noted on 26/5/1949

Copy forwarded to:-
The F.O.
The A.G., B'bay,
The Dir. of Ind. & S.P. Officer, B'bay, (with ref. to his letter No. SP/1146/28/10673, dt. the 23-10-48).

for information

Ab 24/5/49.

Our quotations may kindly be sent to D.I.&S.P.O. Sh/25/5

⊗ In file No. 65-72/36(2)/21901 Sh. p II

Dy. Secy I/c P.P.

(Secn (3))

25/5/49

Issue very urgent
25/5/49

159

65-72/36(2)
32847.

P. W.D.

Cen. Br.

Resubmitted with refce. to Secy (I)'s orders on p. 157 ante.

2. It is presumed that permission to Mr. A. G. Nair, S.E., K.I.C., is not to be given for visiting Jaipur & Kotah. If so, necy. draft informing him accordingly will be put up hereafter. He may also perhaps be asked to state whether he is prepared to go in for the Tailings Machines without actually seeing their working.

8/6/49.

8/6/49

Dy. Secy (Rly)

Secy (I).

8/6

Con. Br.

The draft put up may issue, if approved.

15/6/49.

16/6/49

Dy Secy (RoB)

Letter. 161 6572/36(2)/32847

No. 6572/36(2)-XIV-Con. P.W.D.,
B.C., 17th June 1949.

To

The S.E., K.I.C.

Subject:- Tailings - Core Drilling Machines.

p. 15-5

Refce:- Your letter No. 111, dt: the 14-5-49.

2. Your request that you may be permitted to visit Jaipur & Kotah for seeing the working of Tailing Machines cannot, it is regretted, be granted.

3. Please state whether you are prepared

- to -

to go in for Tailing Machines without actually seeing their working.

15/6/49.

By order etc:

18/6

Sy/16/6/49

Ay. Secy (R+B)

Issue
16/6/49:

17/6

20/6/49

No. G-111 Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 13th June 1949.

To

The Director of Industries &
Stores Purchasing Officer,
Bombay.

Subject: Machinery for the construction of the Ghataprabha Left Bank Canal.

Reference: Government letter No.6572/36-(2)-Con dated 25th May 1949.

I invite reference to the above Government Letter copy enclosed endorsed to you and forward herewith the file of Quotations for compressors received with Government Letter No.6572/36-(2)-Con dated 25th May 1949.

2. For the present, it is proposed to purchase only four Compressors. The remaining two compressors will be purchased as the work advances.

3. Before an order is placed for the four Compressors, it is absolutely necessary to see that the supplying Firm is prepared to fulfil the following conditions:-

i) Immediate delivery, i.e., within about a fortnight from the date of placing the order;

This is necessary as the canal excavation work has already started and the rock cutting will be held up if Compressors are not received immediately.

ii) The Firm should have their established office with servicing staff and equipment in Bombay, so that we can easily contact them any time.

iii) The firm should undertake to depute their Engineer at their cost for sufficiently long period to train our staff and assure prompt service and supply of spare parts. They should have a workshop and servicing station in Bombay.

4. It may also be pointed out that the quotations obtained by you date as far back as October 1948 and it will not be safe to draw any conclusions from them after a lapse of about 9 months unless the quotations are again confirmed by the respective Firms. This may please be done immediately.

5. An order for 4 Compressors of 315 Cft./m capacity on pneumatic wheels may please be placed immediately with any standard Firm complying with the above conditions.

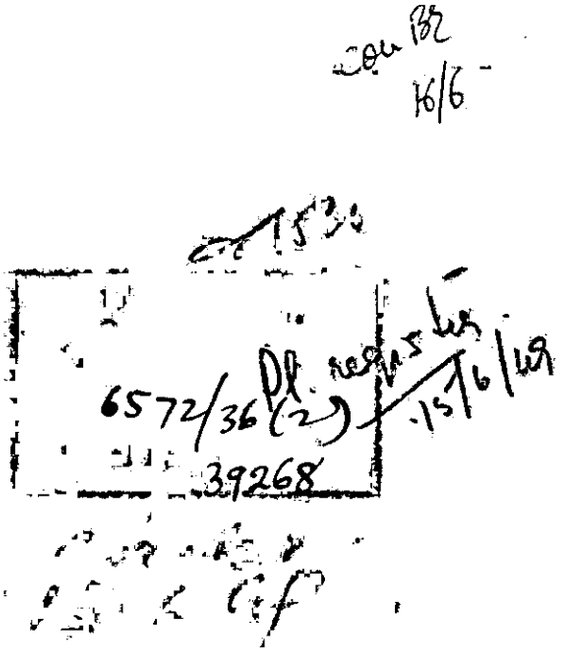
6. It is necessary to order out spare parts and accessories needed for 2 years service along with the Compressors.

D.A:
1 File

Superintending Engineer,
Karnatak Irrigation Circle.

Copy forwarded with compliments to the Secretary to Government, P.W.D., Bombay, for information.

Copy with copy of Govt.Letter referred to forwarded to the Executive Engineer, Ghataprabha Left Bank Canal Division. P.O.Ghataprabha, for information.


6572/36(2)
39268

No. G-111 Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 13th June 1949.

To
The Director of Industries and Stores
Purchasing Officer,
Bombay.

Subject: Purchase of Sharpener equipment
for rock drills.

Reference: This office letter No.G-111 dated
25-3-49 to Government and copy endorsed
to you.

B.158

I invite reference to para 3 of Government letter No.6572/36(2)-Con, dated 25-5-1949, copy endorsed to you directly and would point out that according to comparative statement of cost enclosed with this office letter referred to above, the cost of the Sharpener equipment offered by M/s.Consolidated Pneumatic Tools Co. is the lowest. From enquiries made by me with the Firm, I learnt that they have reserved this equipment in stock at our request since long.

2. We have already received two Compressors and the necessary Rock Drills on the works-site and the work has commenced. If the sharpener equipment is not received in time, the work may be dislocated as the Drill bits and rods require sharpening and shanking very often during operation.

3. I would, therefore, request that the Sharpener equipment reserved by the Consolidated Pneumatic Tools Company may please be ordered out immediately.

BA.:
nil

13/6

Superintending Engineer,
Karnatak Irrigation Circle.

Copy forwarded with compliments to the Secretary to Government, Public Works Department, Bombay.

Copies forwarded with compliments to the Executive Engineer, Ghataprabha Left Bank Canal Division, for information.

BR/13-6.
Compd. by:

166

Cen. Br. P.W.D.

p.164

Submitted together with S. No. 39268.

2. No action is necy. on the refees.

23/6/49.

23/6/49.

A. A. Secy.

24/6/49

con BR 16/6

7571

P. W. D. Registered. 13/6/49

F. 6572/36(2)

Serial No. 39268 — A.

No. G-111 Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar. 21 June 1948.

The Secretary to Government,
Public Works Department,
Bombay.

Subject: Core Drilling Machine. P.161

Reference: Government Letter No.6572/36(2)XIV-Con dated the 17th June 1948.

From the opinion gathered it is felt that the Dealers claims regarding this machine will have to be accepted with some reserve. So it would not be advisable to go in for this new type of costly machine without ascertaining its actual performance. The Dealers have however now informed me that a 750 machine of this type will be in operation at Vik/roli near Bombay and if Government agrees, I propose to see its working there.

Superintending Engineer,
Karnatak Irrigation Circle.

BR/21-6.
Compd. by:

168

Com. For. F. W. [illegible]

The S. E, K. S. I. now proposes to visit Vikroli (Bombay) to see the working of Failings Machines before placing order for the same. Similar request of the S. E. to visit Sholapur & Kolah was [illegible] refused some time back. As the site now to be visited is in Bombay, it is for consideration whether the S. E. may be allowed to visit. Necy. draft letter will be put up on receipt of orders.

[illegible] 6/49.

Dy Supdt (Com) 24/6

Mr Naik may be allowed to visit Vikhroli (near Bay) to see the working of Failings - 750 drilling machine.

Dy (S)

6572/36(2)
41148

Yes [illegible]/6/49

Secy (S)

65-72/36(2)
41148.
P. W. D.

Cri. Br..

The draft put up may issue, if approved. The H.M., P.W.D., may not be troubled with this case.

Thru' F B (I)

P.W.D.
29-6-49.

29/6/49.

By Secy (I)

30/6

30/6

Letter - 170

No. 6572/36(2) - XIV - Con.

P. W. D.,
B.C. 11 June 1969.
1/30

To The S. E. K. I. C.

Subject:- Core Drilling Machine.

Ref. P. 167

Refce:- Your letter No. G-111, dt: the 21st June 1969.

2. You are permitted to visit Vikroli (Bombay) to see the working of Drilling Machines in order to find their suitability for the works of this Dept.

By order etc. D.A:- Nil.

Copy to the A.G., B'bay, for information

29/6/69.

2/7/69

13/7/69

30/6/69

1/7/69

Dy Engr (P&B)

Engr (P) 7/7/69

171

G.C.P.—(J) Qo 74—30,000—3-49 (Spl.—D.I. 117

GOVERNMENT OF BOMBAY

CENTRAL STORES PURCHASING ORGANISATION

Order No. SP. 1613/28/ 859

OFFICE OF THE DIRECTOR OF INDUSTRIES,
OLD CUSTOM HOUSE YARD, FORT:
Bombay, 24 June 19 49.

To

Messrs. Consolidated Pneumatic Tool Co,Ltd.,
Hamilto House, Ballard Estate,
BOMBAY.

SUBJECT :—*Central Stores Purchase*—Order for — Drill Sharpener and Equipment.

Dear Sir,

I accept your offer communicated in your letter No. SCK/NA/17 , dated 18-6-1949. and request you to supply the articles as per schedule overleaf.

2. The total cost of the order for delivery ~~Ex-Godown~~/F.O.R./~~free at destination~~ Bombay. comes to Rs. 33478/8/- only and you should not despatch the goods if the total cost exceeds that amount excluding freight charges, Sales Tax if applicable, and insurance charges if any.

Note.—Packing and forwarding charges from the godown to Railway Station can only be claimed when the rate is Ex-godown. In the case of F.O.R. quotations the above charges are inadmissible.

3. *Inspection.*—By the consignee and/or by any Officer authorised by this office :

4. *Designation and full address of the consignee.*— Executive Engineer, Ghatprabha Left Bank Canal Division, Ghatprabha (Dist. Belgaum).

5. *Despatch instruction.*—Goods should be consigned to to be obtained from the consignee and despatched by Goods/Passenger train at freight

6. *Date of delivery at destination.*— Immediate.

Note.—In the event of your inability to supply the goods by the stipulated date, this office must be informed and no supplies will be normally accepted if delivered late unless prior sanction is obtained.

7. *Bill.*—Your bill in duplicate should be sent to the consignee and copy thereof to this office for record.

8. **Kindly confirm the above order immediately.**

9. Please quote the above order No. on all the correspondence to this office and to the consignee.

10. This office must be kept informed of the progress of the order and intimation should be sent upon completion of the order.

Yours faithfully,

Asstt. ~~Stores Purchasing~~ Officer,
VRR *for* Director of Industries and
2/6 Stores Purchasing Officer.

NSC/25-6
500.

172.

Copy forwarded for information to :—

1. *Indentor.*— Superintending Engineer, Karnatak Irrigation Circle, Dharwar, with reference to his letter No.G-111 dated 13-6-49

2. *Consignee.*— Executive Engineer, Ghataprabha Left Bank Canal Division, Ghataprabha Dist.Belgaum. ~~Dist.Belgaum.~~
(2) Secretary to Govt., P.W.D.Bombay with reference to Govt. letter No.6572/36(2) Con dt.25.5.1949. P. 158

Intimation of the actual receipt of the goods should be sent to this office promptly.

SCHEDULE

Item No.	Description of Articles	Quantity	Rate	Unit	Total cost
1.	Model 210 Portable Air compressor mounted on ~~four~~ four pneumatic tyred wheels.	One	Rs.23850/-	each	Rs.23,850- 0-0
2.	Model DSIPSharpener Bare.	One.	Rs.3245/-	each	Rs. 3,245- 0-0
3.	HP.28 Bit Puncher for mounting on DSIP Sharpener.	One.	Rs.742/8/-	each	Rs. 742- 8-0
4.	DFL Drill Steel Oil Forego forheating Drill Steel for forging or heat treatment.	One.	Rs.2,200/-	each	Rs. 2,200- 0-0
5.	Set of Dies and Dollies for forging Bit and Shanks on 7/8" Hexagonal Steel....	One.	Rs.3091/-	each	Rs. 3,091- 0-0
6.	Quenching Tank for Shank End Oil Quench.	One.	Rs.350/-	each	Rs. 350- 0-0
				Total	Rs.33,478- 8-0

N.B:- The material should be insured against ~~with~~ loss or damage in transit at extra cost to be paid by the consignee.

NSC/25-6

Con BE 197

6572/36(2)

42836

Con B

6572/36(2)
42836.

P.W.D

Cen. Br.

Submitted for information.

2. No action is necy. on the part of this office.

8/7/49.

9/7/49

A. A. Engr.

Asstt
9/7/49

Asstt. to C.E. 10-12-49
— 22/8/49

175-

Very Urgent.
No.G-111.

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar: 12 November 1949.

To

The Secretary to Government,
Public Works Department,
B O M B A Y.

Subject: Machinery for the Ghataprabha Left Bank Canal:
Purchase of Air Compressors. ₺.158

Reference: Government letter No.6572/36(2)-Con, dated the 25th May 1949.

2. In the Government letter referred to above, sanction to the purchase of six Air Compressors of 315 C.F.M. capacity each was accorded. However, as stated in this office letter No. ₺.113 G-111, dated the 13th June 1949 addressed to the Director of Industries and copy endorsed to Government, a firm indent for only four compressors was placed and the purchase of the remaining two compressors was deferred for the time being. The work on the Ghataprabha Left Bank Canal has now sufficiently advanced and the progress being satisfactory, it has been found necessary to open more centres of working on the Canal alignment. As the working centres are spread over a length of about 30 miles, it is considered desirable and also economical to have Air Compressors of smaller capacity of 105 C.F.M. so that each centre can be provided with an independant rock-drilling equipment. This will save a lot of time in shifting the equipment to and fro from centre to centre and also expedite work. It is, therefore, proposed to purchase 5 Air Compressors of 105 C.F.M. capacity costing about Rs.14,000/- each in lieu of the two Air Compressors of 315 C.F.M. costing about Rs.40,000/- each. It will kindly bee seen that there will be no extra cost on account of this deviation.

3. I have, accordingly, requested the Director of Industries & Stores Purchasing Officer to call for quotations and place an order for 5 Air Compressors of 105 C.F.M. available ex-stock Bombay as the equipment is urgently required to cope with the progress of work. In the circumstances, the deviation, as proposed above, may kindly be approved.

Superintending Engineer,
Karnatak Irrigation Circle.

D.A. Nil.

VSD/12.11.
Compd.by:

Cont. 15-111.

P.

File No. 6572/3662

No. 76084

Conds

14 - 11 1~3

6572/36(2)
76084.

Con Bo. P. W. D.

to 158.

In G.L. No. 6572/36(2)- Con, dt: the 25th May 1949, the S.E. Karnl Irrig. Circle, was authorised to purchase 6 Nos of Air Compressors of 315 CFM capacity thro' the Dir of Ind. & Stores Purchasing Officer. The S.E. has, however, purchased only 4 Air Compressors for the reasons given, he now requests Govt: to purchase 5 Nos of Air Compressors of 105 C/F. capacity costing abouts Rs 14,000 each in lieu of the balance of 2 Nos. of Compressors of 315 CFM. capacity costing Rs. about Rs 40,000 each. His request may be granted after 4 o'c. to the F.D.

P. 175

2. The cost is to be debited to provision made for Sh Left Bank Canal Project under the head "68- P.W.R & D.P"

HK !!!.

18/11/49

18/11/49

FINANCE DEPARTMENT
File no. P W R I
Date 21/11/49
Serial No

19/11

21/11/49

Recd in FD at 6 P.M. 21/11/49

Urgent

M.O to the F.D dt 21st Nov 49

Finance Dept.

Part I

The proposal made by the P.W.D. may be agreed to.

24/11/49.

Secy. to Govt. P.W.D. 24/11/49.

P. W.
File No. 6532/3C(2)
Serial No. 79801

P.W.D.

Con. Br.

The draft bus up may issue if approved.

26/11/49.

28/11

Dy. Secy. (Fin.)

C 572/36(2)
79801

Letter 179

XIV

No 6572/36(2)-Gen.

P W D

B C 15 Nov. 1949
(Bombay No 1) 29

To. The S E, Karad Irrig. Circle.

Subject:- Machinery for the Gh.
Left Bank Canal

p. 175

Refee:- Your letter No. G. III/1, dt the 12th Nov. 1949.

2. Govt is pleased to approve your request to purchase 5 Nos of Air Compressors of 10 C/f capacity costing about Rs. 14,000. each in lieu of 2 out of 6 Nos of Air Compressors of 315 C/f capacity sanctd. in

Read 2/3/1949

p. 158.

G. R. No. 6572/36(2)-. Gen, dt. The 25th May

180

May 1949. D.A. No 4

By order etc

Copy forwarded to
The F.D
The A.G.G B'bay,
The Dir. of Ind. & P. Officer, p. 158

for information with ref. to G.E No. 6572/36(2)-
Com. dt. the 25th May 1949

Issued 2/12/49

AD 26/11/49.

T.C.T.

Dy Secy

2/12/49